

THE SOLID WASTE DISPOSAL ACT
AS AMENDED BY
THE HAZARDOUS AND SOLID WASTE AMEND-
MENTS OF 1984 (PUBLIC LAW 98-616);
THE SAFE DRINKING WATER ACT AMEND-
MENTS OF 1986 (PUBLIC LAW 99-339);
AND THE SUPERFUND AMENDMENTS AND
REAUTHORIZATION ACT OF 1986 (PUBLIC
LAW 99-499)



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¹ P.L. 99-339 Safe Drinking Water Act Amendments.

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¹ P.L. 99-339, Safe Drinking Water Act Amendments.

NOTE

Amendments to the Solid Waste Disposal Act made by the Hazardous and Solid Waste Amendments of 1984 (P.L. 98-616), the Safe Drinking Water Act Amendments of 1986 (P.L. 99-339), and the Superfund Amendments and Reauthorization Act of 1986 (P.L. 99-499) are shown as follows:

Language to be deleted is enclosed in black brackets; new language is printed in italic; and language in which there is no change is shown in roman. Footnotes will indicate whether the amendment was made by Public Law 99-339 or Public Law 99-499. The absence of a footnote indicates that the amendment was made by Public Law 98-616.

AN ACT To provide technical and financial assistance for the development of management plans and facilities for the recovery of energy and other resources from discarded materials and for the safe disposal of discarded materials, and to regulate the management of hazardous waste

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

* * * * *

TITLE II—SOLID WASTE DISPOSAL

Subtitle A—General Provisions

* * * * *

CONGRESSIONAL FINDINGS

SEC. 1002. (a) SOLID WASTE.—The Congress finds with respect to solid waste—

(1) that the continuing technological progress and improvement in methods of manufacture, packaging, and marketing of consumer products has resulted in an ever-mounting increase, and in a change in the characteristics, of the mass material discarded by the purchaser of such products;

(2) that the economic and population growth of our Nation, and the improvements in the standard of living enjoyed by our population, have required increased industrial production to meet our needs, and have made necessary the demolition of old buildings, the construction of new buildings, and the provision of highways and other avenues of transportation, which, together with related industrial, commercial, and agricultural operations, have resulted in a rising tide of scrap, discarded, and waste materials;

(3) that the continuing concentration of our population in expanding metropolitan and other urban areas has presented these communities with serious financial, management, inter-governmental, and technical problems in the disposal of solid wastes resulting from the industrial, commercial, domestic, and other activities carried on in such areas;

(4) that while the collection and disposal of solid wastes should continue to be primarily the function of State, regional, and local agencies, the problems of waste disposal as set forth above have become a matter national in scope and in concern and necessitate Federal action through financial and technical assistance and leadership in the development, demonstration, and application of new and improved methods and processors to reduce the amount of waste and unsalvageable materials and to provide for proper and economical solid waste disposal practices.

(b) ENVIRONMENT AND HEALTH.—The Congress finds with respect to the environment and health, that—

(1) although land is too valuable a national resource to be needlessly polluted by discarded materials, most solid waste is disposed of on land in open dumps and sanitary landfills;

(2) disposal of solid waste and hazardous waste in or on the land without careful planning and management can present a danger to human health and the environment;

(3) as a result of the Clean Air Act, the Water Pollution Control Act, and other Federal and State laws respecting public health and the environment, greater amounts of solid waste (in the form of sludge and other pollution treatment residues) have been created. Similarly, inadequate and environmentally unsound practices for the disposal or use of solid waste have created greater amounts of air and water pollution and other problems for the environment and for health;

(4) open dumping is particularly harmful to health, contaminates drinking water from underground and surface supplies, and pollutes the air and land;

[(5) hazardous waste presents, in addition to the problems associated with nonhazardous solid waste, special dangers to health and requires a greater degree of regulation than does nonhazardous solid waste; and]

(5) the placement of inadequate controls on hazardous waste management will result in substantial risks to human health and the environment;

(6) if hazardous waste management is improperly performed in the first instance, corrective action is likely to be expensive, complex, and time consuming;

(7) certain classes of land disposal facilities are not capable of assuring long-term containment of certain hazardous wastes, and to avoid substantial risk to human health and the environment, reliance on land disposal should be minimized or eliminated, and land disposal, particularly landfill and surface impoundment, should be the least favored method for managing hazardous wastes; and

[(6)] (8) alternatives to existing methods of land disposal must be developed since many of the cities in the United

States will be running out of suitable solid waste disposal sites within five years unless immediate action is taken【;】.

(c) MATERIALS.—The Congress finds with respect to materials, that—

(1) millions of tons of recoverable material which could be used are needlessly buried each year;

(2) methods are available to separate usable materials from solid waste; and

(3) the recovery and conservation of such materials can reduce the dependence of the United States on foreign resources and reduce the deficit in its balance of payments.

(d) ENERGY.—The Congress finds with respect to energy, that—

(1) solid waste represents a potential source of solid fuel, oil, or gas that can be converted into energy;

(2) the need exists to develop alternative energy sources for public and private consumption in order to reduce our dependence on such sources as petroleum products, natural gas, nuclear and hydroelectric generation; and

(3) technology exists to produce usable energy from solid waste.

OBJECTIVES AND NATIONAL POLICY

SEC. 1003. (a) OBJECTIVES.—The objectives of this Act are to promote the protection of health, and the environment and to conserve valuable material and energy resources by—

(1) providing technical and financial assistance to State and local governments and interstate agencies for the development of solid waste management plans (including resource recovery and resource conservation systems) which will promote improved solid waste management techniques (including more effective organizational arrangements), new and improved methods of collection, separation and recovery of solid waste, and the environmentally safe disposal of nonrecoverable residues;

(2) providing training grants in occupations involving the design, operation, and maintenance of solid waste disposal systems;

(3) prohibiting future open dumping on the land and requiring the conversion of existing open dumps to facilities which do not pose a danger to the environment or to health;

【(4) regulating the treatment, storage, transportation, and disposal of hazardous wastes which have adverse effects on health and the environment;】

(4) assuring that hazardous waste management practices are conducted in a manner which protects human health and the environment;

(5) requiring that hazardous waste be properly managed in the first instance thereby reducing the need for corrective action at a future date;

(6) minimizing the generation of hazardous waste and the land disposal of hazardous waste by encouraging process substitution, materials recovery, properly conducted recycling and reuse, and treatment;

(7) establishing a viable Federal-State partnership to carry out the purposes of this Act and insuring that the Administrator will, in carrying out the provisions of subtitle C of this Act, give a high priority to assisting and cooperating with States in obtaining full authorization of State programs under subtitle C;

[(5)] (8) providing for the promulgation of guidelines for solid waste collection, transport, separation, recovery, and disposal practices and systems;

[(6)] (9) promoting a national research and development program for improved solid waste management and resource conservation techniques, more effective organizational arrangements, and new and improved methods of collection, separation, and recovery and recycling of solid wastes and environmentally safe disposal of nonrecoverable resources;

[(7)] (10) promoting the demonstration, construction, and application of solid waste management, resource recovery, and resource conservation systems which preserve and enhance the quality of air, water, and land resources; and

[(8)] (11) establishing a cooperative effort among the Federal, State, and local governments and private enterprise in order to recover valuable materials and energy from solid waste.

(b) *NATIONAL POLICY.*—The Congress hereby declares it to be the national policy of the United States that, wherever feasible, the generation of hazardous waste is to be reduced or eliminated as expeditiously as possible. Waste that is nevertheless generated should be treated, stored, or disposed of so as to minimize the present and future threat to human health and the environment.

DEFINITIONS

SEC. 1004. As used in this Act:

(1) The term "Administrator" means the Administrator of the Environmental Protection Agency.

(2) The term "construction," with respect to any project of construction under this Act, means (A) the erection or building of new structures and acquisition of lands or interests therein, or the acquisition, replacement, expansion, remodeling, alteration, modernization, or extension of existing structures, and (B) the acquisition and installation of initial equipment of, or required in connection with, new or newly acquired structures or the expanded, remodeled, altered, modernized or extended part of existing structures (including trucks and other motor vehicles, and tractors, cranes, and other machinery) necessary for the proper utilization and operation of the facility after completion of the project; and includes preliminary planning to determine the economic and engineering feasibility and the public health and safety aspects of the project, the engineering, architectural, legal, fiscal, and economic investigations and studies, and any surveys, designs, plans, working drawing, specifications, and other action necessary for the carrying out of the project, and (C) the inspection and supervision of the process of carrying out the project to completion.

(2A) The term "demonstration" means the initial exhibition of a new technology process or practice or a significantly new combina-

tion or use of technologies, processes or practices, subsequent to the development stage, for the purpose of proving technological feasibility and cost effectiveness.

(3) The term "disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

(4) The term "Federal agency" means any department, agency, or other instrumentality of the Federal Government, any independent agency or establishment of the Federal Government including any Government corporation, and the Government Printing Office.

(5) The term "hazardous waste" means a solid waste, or combination of solid waste, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may—

(A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

(6) The term "hazardous waste generation" means the act or process of producing hazardous waste.

(7) The term "hazardous waste management" means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of hazardous wastes.

(8) For purposes of Federal financial assistance (other than rural communities assistance), the term "implementation" does not include the acquisition, leasing, construction, or modification of facilities or equipment or the acquisition, leasing or improvement of land.

(9) The term "intermunicipal agency" means an agency established by two or more municipalities with responsibility for planning or administration of solid waste.

(10) The term "interstate agency" means an agency of two or more municipalities in different States, or an agency established by two or more States, with authority to provide for the management of solid wastes and serving two or more municipalities located in different States.

(11) The term "long-term contract" means, when used in relation to solid waste supply, a contract of sufficient duration to assure the viability of a resource recovery facility (to the extent that such viability depends upon solid waste supply).

(12) The term "manifest" means the form used for indentifying the quantity, composition, and the origin, routing, and destination of hazardous waste during its transportation from the point of generation to the point of disposal, treatment, or storage.

(13) The term "municipality" (A) means a city, town, borough, county, parish, district, or other public body created by or pursuant to State law, with responsibility for the planning or administration of solid waste management, or an Indian tribe or authorized tribal organization or Alaska Native village or organization, and (B) in-

cludes any rural community or unincorporated town or village or any other public entity for which an application for assistance is made by a State or political subdivision thereof.

(14) The term "open dump" means any facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 and which is not a facility for disposal of hazardous waste.

(15) The term "person" means an individual, trust, firm, joint stock company, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body.

(16) The term "procurement item" means any device, good, substance, material, product, or other item whether real or personal property which is the subject of any purchase, barter, or other exchange made to procure such item.

(17) The term "procuring agency" means any Federal agency, or any State agency or agency of a political subdivision of a State which is using appropriated Federal funds for such procurement, or any person contracting with any such agency with respect to work performed under such contract.

(18) The term "recoverable" refers to the capability and likelihood of being recovered from solid waste for a commercial or industrial use.

(19) The term "recovered material" means waste material and byproducts which have been recovered or diverted from solid waste, but such term does not include those materials and byproducts generated from, and commonly reused within, an original manufacturing process.

(20) The term "recovered resources" means material or energy recovered from solid waste.

(21) The term "resource conservation" means reduction of the amounts of solid waste that are generated, reduction of overall resource consumption, and utilization of recovered resources.

(22) The term "resource recovery" means the recovery of material or energy from solid waste.

(23) The term "resource recovery system" means a solid waste management system which provides for collection, separation, recycling, and recovery of solid wastes, including disposal of nonrecoverable waste residues.

(24) The term "resource recovery facility" means any facility of which solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing solid waste for reuse.

(25) The term "regional authority" means the authority established or designated under section 4006.

(26) The term "sanitary landfill" means a facility for the disposal of solid waste which meets the criteria published under section 4004.

(26A) The term "sludge" means any solid, semisolid or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effects.

(27) The term "solid waste" means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923).

(28) The term "solid waste management" means the systematic administration of activities which provide for the collection, source separation, storage, transportation, transfer, processing, treatment, and disposal of solid waste.

(29) The term "solid waste management facility" includes—

(A) any resource recovery system or component thereof,

(B) any system, program, or facility for resource conservation, and

(C) any facility for the collection, source separation, storage, transportation, transfer, processing, treatment or disposal of solid wastes, including hazardous wastes, whether such facility is associated with facilities generating such wastes or otherwise.

(30) The terms "solid waste planning", "solid waste management", and "comprehensive planning" include planning or management respecting resource recovery and resource conservation.

(31) The term "State" means any of the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

(32) The term "State authority" means the agency established or designated under section 4007.

(33) The term "storage", when used in connection with hazardous waste, means the containment of hazardous waste, either on a temporary basis or for a period of years, in such a manner as not to constitute disposal of such hazardous waste.

(34) The term "treatment", when used in connection with hazardous waste, means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste or so as to render such waste nonhazardous, safer for transport, amenable for recovery, amenable for storage, or reduced in volume. Such term includes any activity or processing designed to change the physical form or chemical composition of hazardous waste so as to render it nonhazardous.

(35) The term "virgin material" means a raw material, including previously unused copper, aluminum, lead, zinc, iron, or other metal or metal ore, any undeveloped resource that is, or with new technology will become, a source of raw materials.

(36) The term "used oil" means any oil which has been—

(A) refined from crude oil,

(B) used, and

(C) as a result of such use, contaminated by physical or chemical impurities.

(37) The term "recycled oil" means any used oil which is reused, following its original use, for any purpose (including the purpose for which the oil was originally used). Such term includes oil which is re-refined, reclaimed, burned, or reprocessed.

(38) The term "lubricating oil" means the fraction of crude oil which is sold for purposes of reducing friction in any industrial or mechanical device. Such term includes re-refined oil.

(39) The term "re-refined oil" means used oil from which the physical and chemical contaminants acquired through previous use have been removed through a refining process.

GOVERNMENTAL COOPERATION

SEC. 1005. (a) INTERSTATE COOPERATION.—The provisions of this Act to be carried out by States may be carried out by interstate agencies and provisions applicable to States may apply to interstate regions where such agencies and regions have been established by the respective States and approved by the Administrator. In any such case, action required to be taken by the Governor of a State, respecting regional designation shall be required to be taken by the Governor of each of the respective States with respect to so much of the interstate region as is within the jurisdiction of that State.

(b) CONSENT OF CONGRESS TO COMPACTS.—The consent of the Congress is hereby given to two or more States to negotiate and enter into agreement or compacts, not in conflict with any law or treaty of the United States, for—

(1) cooperative effort and mutual assistance for the management of solid waste or hazardous waste (or both) and the enforcement of their respective laws relating thereto, and

(2) the establishment of such agencies, joint or otherwise, as they may deem desirable for marking effective such agreements or compacts.

No such agreement or compact shall be binding or obligatory upon any State a party thereto unless it is agreed upon by all parties to the agreement and until it has been approved by the Administrator and the Congress.

APPLICATION OF ACT AND INTEGRATION WITH OTHER ACTS

SEC. 1006. (a) APPLICATION OF ACT.—Nothing in this Act shall be construed to apply to (or to authorize any State, interstate, or local authority to regulate) any activity or substance which is subject to the Federal Water Pollution Control Act (33 U.S.C. 1151 and following), the Safe Drinking Water Act (42 U.S.C. 300f and following), the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1401 and following), or the Atomic Energy Act of 1954 (42 U.S.C. 2011 and following) except to the extent that such application (or regulation) is not inconsistent with the requirements of such Acts.

(b) INTEGRATION WITH OTHER ACTS.—(1) The Administrator shall integrate all provisions of this Act for purposes of administration and enforcement and shall avoid duplication, to the maximum

extent practicable, with the appropriate provisions of the Clean Air Act (42 U.S.C. 1857 and following), the Federal Water Pollution Control Act (33 U.S.C. 1151 and following), the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 135 and following), the Safe Drinking Water Act (42 U.S.C. 300f and following), the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1401 and following) and such other Acts of Congress as grant regulatory authority to the Administrator. Such integration shall be effected only to the extent that it can be done in a manner consistent with the goals and policies expressed in this Act and in the other acts referred to in this subsection.

(2)(A) *As promptly as practicable after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall submit a report describing—*

(i) the current data and information available on emissions of polychlorinated dibenzo-p-dioxins from resource recovery facilities burning municipal solid waste;

(ii) any significant risks to human health posed by these emissions; and

(iii) operating practices appropriate for controlling these emissions.

(B) *Based on the report under subparagraph (A) and on any future information on such emissions, the Administrator may publish advisories or guidelines regarding the control of dioxin emissions from such facilities. Nothing in this paragraph shall be construed to preempt or otherwise affect the authority of the Administrator to promulgate any regulations under the Clean Air Act regarding emissions of polychlorinated dibenzo-p-dioxins.*

(3) *Notwithstanding any other provisions of law, in developing solid waste plans, it is the intention of this Act that in determining the size of a waste-to-energy facility, adequate provisions shall be given to the present and reasonably anticipated future needs, including those needs created by thorough implementation of section 6002(h), of the recycling and resource recovery interests within the area encompassed by the solid waste plan.*

(c) **INTEGRATION WITH THE SURFACE MINING CONTROL AND RECLAMATION ACT OF 1977.**—(1) No later than 90 days after the date of enactment of the Solid Waste Disposal Act Amendments of 1980, the Administrator shall review any regulations applicable to the treatment, storage, or disposal of any coal mining wastes or overburden promulgated by the Secretary of the Interior under the Surface Mining and Reclamation Act of 1977. If the Administrator determines that any requirement of final regulations promulgated under any section of subtitle C relating to mining wastes or overburden is not adequately addressed in such regulations promulgated by the Secretary, the Administrator shall promptly transmit such determination, together with suggested revisions and supporting documentation, to the Secretary.

(2) The Secretary of the Interior shall have exclusive responsibility for carrying out any requirement of subtitle C of this Act with respect to coal mining wastes or overburden for which a surface coal mining and reclamation permit is issued or approved under the Surface Mining Control and Reclamation Act of 1977. The Secretary shall, with the concurrence of the Administrator, promul-

gate such regulations as may be necessary to carry out the purposes of this subsection and shall integrate such regulations with regulations promulgated under the Surface Mining Control and Reclamation Act of 1977.

FINANCIAL DISCLOSURE

SEC. 1007. (a) STATEMENT.—Each officer or employee of the Administrator who—

(1) performs any function or duty under this Act; and
 (2) has any known financial interest in any person who applies for or receives financial assistance under this Act
 shall, beginning on February 1, 1977, annually file with the Administrator a written statement concerning all such interests held by such officer or employee during the preceding calendar year. Such statement shall be available to the public.

(b) ACTION BY ADMINISTRATOR.—The Administrator shall—

(1) act within ninety days after the date of enactment of this Act—

(A) to define the term “known financial interest” for purposes of subsection (a) of this section; and

(B) to establish the methods by which the requirement to file written statements specified in subsection (a) of this section will be monitored and enforced, including appropriate provision for the filing by such officers and employees of such statements and the review by the Administrator of such statements; and

(2) report to the Congress on June 1, 1978, and on each succeeding calendar year with respect to such disclosures and the actions taken in regard thereto during the preceding calendar year.

(c) EXEMPTION.—In the rules prescribed under subsection (b) of this section, the Administrator may identify specific positions within the Environment Protection Agency which are of a nonpolicy-making nature and provide that officers or employees occupying such positions shall be exempt from the requirements of this section.

(d) PENALTY.—Any officer or employee who is subject to, and knowingly violates, this section shall be fined not more than \$2,500 or imprisoned not more than one year, or both.

SOLID WASTE MANAGEMENT INFORMATION AND GUIDELINES

SEC. 1008. (a) GUIDELINES.—Within one year of enactment of this section, and from time to time thereafter, the Administrator shall, in cooperation with appropriate Federal, State, municipal, and intermunicipal agencies, and in consultation with other interested persons, and after public hearings, develop and publish suggested guidelines for solid waste management. Suggested guidelines shall—

(1) provide a technical and economic description of the level of performance that can be attained by various available solid waste management practices (including operating practices) which provide for the protection of public health and the environment;

(2) not later than two years after the enactment of this section, describe levels of performance, including appropriate methods and degrees of control, that provide at a minimum for (A) protection of public health and welfare; (B) protection of the quality of ground waters and surface waters from leachates; (C) protection of the quality of surface waters from runoff through compliance with effluent limitations under the Federal Water Pollution Control Act, as amended; (D) protection of ambient air quality through compliance with new source performance standards or requirements of air quality implementation plans under the Clean Air Act, as amended; (E) disease and vector control; (F) safety; and (G) esthetics; and

(3) provide minimum criteria to be used by the States to define those solid waste management practices which constitute the open dumping of solid waste or hazardous waste and are to be prohibited under subtitle D of this Act.

Where appropriate, such suggested guidelines also shall include minimum information for use in deciding the adequate location, design, and construction of facilities associated with solid waste management practices, including the consideration of regional, geographic, demographic, and climatic factors.

(b) NOTICE.—The Administrator shall notify the Committee on Public Works² of the Senate and the Committee on Interstate and Foreign Commerce of the House of Representatives a reasonable time before publishing any suggested guidelines or proposed regulations under this Act of the content of such proposed suggested guidelines or proposed regulations under this Act.

Subtitle B—Office of Solid Waste; Authorities of the Administrator and Interagency Coordinating Committee

SEC. 2001. (a) OFFICE OF SOLID WASTE.—The Administrator shall establish within the Environmental Protection Agency an Office of Solid Waste (hereinafter referred to as the "Office") to be headed by an Assistant Administrator of the Environmental Protection Agency.³ The duties and responsibilities (other than duties and responsibilities relating to research and development) of the Administrator under this Act (as modified by applicable reorganization plans) shall be carried out through the Office.

(b) INTERAGENCY COORDINATING COMMITTEE.—(1) There is hereby established an Interagency Coordinating Committee on Federal Resource Conservation and Recovery Activities which shall have the responsibility for coordinating all activities dealing with resource conservation and recovery from solid waste carried out by the Environmental Protection Agency, the Department of Energy, the Department of Commerce, and all other Federal agencies which conduct such activities pursuant to this or any other Act. For purposes of this subsection, the term "resource conservation and recovery activities" shall include, but not be limited to, all research, development and demonstration projects on resource conservation or

² Pursuant to the adoption of S. Res. 4, Senate Committee Reorganization, the committee was renamed "Committee on Environment and Public Works."

³ This amendment was made by Public Law 96-510, the Comprehensive Environmental Response, Compensation, and Liability Act of 1980.

energy, or material, recovery from solid waste, and all technical or financial assistance for State or local planning for, or implementation of, projects related to resource conservation or energy or material, recovery from solid waste. The Committee shall be chaired by the Administrator of the Environmental Protection Agency or such person as the Administrator may designate. Members of the Committee shall include representatives of the Department of Energy, the Department of Commerce, the Department of the Treasury, and each other Federal agency which the Administrator determines to have programs or responsibilities affecting resource conservation or recovery.

(2) The Interagency Coordinating Committee shall include oversight of the implementation of

(A) the May 1979 Memorandum of Understanding on Energy Recovery from Municipal Solid Waste between the Environmental Protection Agency and the Department of Energy;

(B) the May 30, 1978, Interagency Agreement between the Department of Commerce and the Environmental Protection Agency on the Implementation of the Resource Conservation and Recovery Act; and

(C) any subsequent agreements between these agencies or other Federal agencies which address Federal resource recovery or conservation activities.

(3) The Interagency Coordinating Committee shall submit to the Congress by March 1, 1981, and on March 1 each year thereafter, a five-year action plan for Federal resource conservation or recovery activities which shall identify means and propose programs to encourage resource conservation or material and energy recovery and increase private and municipal investment in resource conservation or recovery systems, especially those which provide for material conservation or recovery as well as energy conservation or recovery. Such plan shall describe, at a minimum, a coordinated and nonduplicatory plan for resource recovery and conservation activities for the Environmental Protection Agency, the Department of Energy, the Department of Commerce, and all other Federal agencies which conduct such activities.

AUTHORITIES OF ADMINISTRATOR

SEC. 2002. (a) AUTHORITIES.—In carrying out this Act, the Administrator is authorized to—

(1) prescribe, in consultation with Federal, State, and regional authorities, such regulations as are necessary to carry out his functions under this Act;

(2) consult with or exchange information with other Federal agencies undertaking research, development, demonstration projects, studies, or investigations relating to solid waste;

(3) provide technical and financial assistance to States or regional agencies in the development and implementation of solid waste plants and hazardous waste management programs;

(4) consult with representatives of science, industry, agriculture, labor, environmental protection and consumer organizations, and other groups, as he deems advisable;

(5) utilize the information, facilities, personnel and other resources of Federal agencies, including the National Bureau of Standards and the National Bureau of the Census, on a reimbursable basis, to perform research and analyses and conduct studies and investigations related to resource recovery and conservation and to otherwise carry out the Administrator's functions under this Act; and

(6) to delegate to the Secretary of Transportation the performance of any inspection or enforcement function under this Act relating to the transportation of hazardous waste where such delegation would avoid unnecessary duplication of activity and would carry out the objectives of this Act and of the Hazardous Materials Transportation Act.

(b) **REVISION OF REGULATIONS.**—Each regulation promulgated under this Act shall be reviewed and, where necessary, revised not less frequently than every three years.

(c) **CRIMINAL INVESTIGATIONS.**—*In carrying out the provisions of this Act, the Administrator, and duly-designated agents and employees of the Environmental Protection Agency, are authorized to initiate and conduct investigations under the criminal provisions of this Act, and to refer the results of these investigations to the Attorney General for prosecution in appropriate cases.*

RESOURCE RECOVERY AND CONSERVATION PANELS

SEC. 2003. The Administrator shall provide teams of personnel, including Federal, State, and local employees or contractors (hereinafter referred to as "Resource Conservation and Recovery Panels") to provide Federal agencies, States, and local governments, upon request, with technical assistance on solid waste management, resource recovery and resource conservation. Such teams shall include technical, marketing, financial, and institutional specialists, and the services of such teams shall be provided without charge to States or local governments.

GRANTS FOR DISCARDED TIRE DISPOSAL

SEC. 2004. (a) **GRANTS.**—The Administrator shall make available grants equal to 5 percent of the purchase price of tire shredders (including portable shredders attached to tire collection trucks) to those eligible applicants best meeting criteria promulgated under this section. An eligible applicant may be any private purchaser, public body, or public-private joint venture. Criteria for receiving grants shall be promulgated under this section and shall include the policy to offer any private purchaser the first option to receive a grant, the policy to develop widespread geographic distribution of tire shredding facilities, the need for such facilities within a geographic area, and the projected risk and viability of any such venture. In the case of an application under this section from a public body, the Administrator shall first make a determination that there are no private purchasers interested in making an application before approving a grant to a public body.

(b) **AUTHORIZATION.**—There is authorized to be appropriated \$750,000 for each of the fiscal years 1978 and 1979 to carry out this section.

LABELING OF CERTAIN OIL

SEC. 2005. For purposes of any provision of law which requires the labeling of commodities, including oil shall be treated as lawfully labeled only if it bears the following statement, prominently displayed;

"DON'T POLLUTE—CONSERVE RESOURCES; RETURN USED OIL TO COLLECTION CENTERS"

ANNUAL REPORT

SEC. 2006. The Administrator shall transmit to the Congress and the President, not later than ninety days after the end of each fiscal year, a comprehensive and detailed report on all activities of the Office during the preceding fiscal year. Each such report shall include—

(1) a statement of specific and [detail] *detailed* objectives for the activities and programs conducted and assisted under this Act;

(2) statements of the Administrator's conclusions as to the effectiveness of such activities and programs in meeting the stated objectives and the purposes of this Act, measured through the end of such fiscal year;

(3) a summary of outstanding solid waste problems confronting the Administrator, in order of priority;

(4) recommendations with respect to such legislation which the Administrator deems necessary or desirable to assist in solving problems respecting solid waste;

(5) all other information required to be submitted to the Congress pursuant to any other provision of this Act; and

(6) the Administrator's plans for activities and programs respecting solid waste during the next fiscal year.

GENERAL AUTHORIZATION

SEC. 2007. (a) GENERAL ADMINISTRATION.—There are authorized to be appropriated to the Administrator for the purpose of carrying out the provisions of this Act, \$35,000,000 for the fiscal year ending September 30, 1977, \$38,000,000 for the fiscal year ending September 30, 1978, \$42,000,000 for the fiscal year ending September 30, 1979, \$70,000,000 for the fiscal year ending September 30, 1980, \$80,000,000 for the fiscal year ending September 30, 1981, [and \$80,000,000 for the fiscal year ending September 30, 1982.] *\$80,000,000 for the fiscal year ending September 30, 1982, \$70,000,000 for the fiscal year ending September 30, 1985, \$80,000,000 for the fiscal year ending September 30, 1986, \$80,000,000 for the fiscal year ending September 30, 1987, and \$80,000,000 for the fiscal year 1988.*

(b) RESOURCE RECOVERY AND CONSERVATION PANELS.—Not less than 20 percent of the amount appropriated under subsection (a), or \$5,000,000 per fiscal year, whichever is less, shall be used only for purposes of Resource Recovery and Conservation Panels established under section 2003 (including travel expenses incurred by such panels in carrying out their functions under this Act).

(c) **HAZARDOUS WASTE.**—Not less than 30 percent of the amount appropriated under subsection (a) shall be used only for purposes of carrying out subtitle C of this Act (relating to hazardous waste) other than section 3011.

(d) **STATE AND LOCAL SUPPORT.**—Not less than 25 per centum of the total amount appropriated under this title, up to the amount authorized in section 4008(a)(1), shall be used only for purposes of support to State, regional, local, and interstate agencies in accordance with subtitle D of this Act other than section 4008(a)(2) or 4009.

(e) **CRIMINAL INVESTIGATORS.**—There is authorized to be appropriated to the Administrator \$3,246,000 for the fiscal year 1985, \$2,408,300 for the fiscal year 1986, \$2,529,000 for the fiscal year 1987, and \$2,529,000 for the fiscal year 1988 to be used—

(1) for additional officers or employees of the Environmental Protection Agency authorized by the Administrator to conduct criminal investigations (to investigate, or supervise the investigation of, any activity for which a criminal penalty is provided) under this Act; and

(2) for support costs for such additional officers or employees.

(f) **UNDERGROUND STORAGE TANKS.**—(1) There are authorized to be appropriated to the Administrator for the purpose of carrying out the provisions of subtitle I (relating to regulation of underground storage tanks), \$10,000,000 for each of the fiscal years 1985 through 1988.

(2) There is authorized to be appropriated \$25,000,000 for each of the fiscal years 1985 through 1988 to be used to make grants to the States for purposes of assisting the States in the development and implementation of approved State underground storage tank release detection, prevention, and correction programs under subtitle I.

OFFICE OF OMBUDSMAN

SEC. 2008. (a) ESTABLISHMENT; FUNCTIONS.—The Administrator shall establish an Office of Ombudsman, to be directed by an Ombudsman. It shall be the function of the Office of Ombudsman to receive individual complaints, grievances, requests for information submitted by any person with respect to any program or requirement under this Act.

(b) **AUTHORITY TO RENDER ASSISTANCE.**—The Ombudsman shall render assistance with respect to the complaints, grievances, and requests submitted to the Office of Ombudsman, and shall make appropriate recommendations to the Administrator.

(c) **EFFECT ON PROCEDURES FOR GRIEVANCES, APPEALS, OR ADMINISTRATIVE MATTERS.**—The establishment of the Office of Ombudsman shall not affect any procedures for grievances, appeals, or administrative matters in any other provision of this Act, any other provision of law, or any Federal regulation.

(d) **TERMINATION.**—The Office of the Ombudsman shall cease to exist 4 years after the date of enactment of the Hazardous and Solid Waste Amendments of 1984.

Subtitle C—Hazardous Waste Management

IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

SEC. 3001. (a) **CRITERIA FOR IDENTIFICATION OR LISTING.**—Not later than eighteen months after the date of the enactment of this Act, the Administrator shall, after notice and opportunity for public hearing, and after consultation with appropriate Federal and State agencies, develop and promulgate criteria for identifying the characteristics of hazardous waste, and for listing hazardous waste, which should be subject to the provisions of this subtitle, taking into account toxicity, persistence, and degradability in nature, potential for accumulation in tissue, and other related factors such as flammability, corrosiveness, and other hazardous characteristics. Such criteria shall be revised from time to time as may be appropriate.

(b)(1) **IDENTIFICATION AND LISTING.**—Not later than eighteen months after the date of enactment of this section, and after notice and opportunity for public hearing, the Administrator shall promulgate regulations identifying the characteristics of hazardous waste, and listing particular hazardous wastes (within the meaning of section 1004(5)), which shall be subject to the provisions of this subtitle. Such regulations shall be based on the criteria promulgated under subsection (a) and shall be revised from time to time thereafter as may be appropriate. *The Administrator, in cooperation with the Agency for Toxic Substances and Disease Registry and the National Toxicology Program, shall also identify or list those hazardous wastes which shall be subject to the provisions of this subtitle solely because of the presence in such wastes of certain constituents (such as identified carcinogens, mutagens, or teratogens) at levels in excess of levels which endanger human health.*

(2)(A) Notwithstanding the provisions of paragraph (1) of this subsection, drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas or geothermal energy shall be subject only to existing State or Federal regulatory programs in lieu of subtitle C until at least 24 months after the date of enactment of the Solid Waste Disposal Act Amendments of 1980 and after promulgation of the regulations in accordance with subparagraphs (B) and (C) of this paragraph. It is the sense of the Congress that such State or Federal programs should include, for waste disposal sites which are to be closed, provisions requiring at least the following:

(i) The identification through surveying, platting, or other measures, together with recordation of such information on the public record, so as to assure that the location where such wastes are disposed of can be located in the future; except however, that no such surveying, platting, or other measure identifying the location of a disposal site for drilling fluids and associated wastes shall be required if the distance from the disposal site to the surveyed or platted location to the associated well is less than two hundred lineal feet; and

(ii) A chemical and physical analysis of a produced water and a composition of a drilling fluid suspected to contain a haz-

ardous material, with such information to be acquired prior to closure and to be placed on the public record.

(B) Not later than six months after completion and submission of the study required by section 8002(m) of this Act, the Administrator shall, after public hearings and opportunity for comment, determine either to promulgate regulations under this subtitle for drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas or geothermal energy or that such regulations are unwarranted. The Administrator shall publish his decision in the Federal Register accompanied by an explanation and justification of the reasons for it. In making the decision under this paragraph, the Administrator shall utilize the information developed or accumulated pursuant to the study required under section 8002(m).

(C) The Administrator shall transmit his decision, along with any regulations, if necessary, to both Houses of Congress. Such regulations shall take effect only when authorized by Act of Congress.

(3)(A) Notwithstanding the provisions of paragraph (1) of this subsection, each waste listed below shall, except as provided in subparagraph (B) of this paragraph, be subject only to regulation under other applicable provisions of Federal or State law in lieu of this subtitle until at least six months after the date of submission of the applicable study required to be conducted under subsection (f), (n), (o), or (p) of section 8002 of this Act and after promulgation of regulations in accordance with subparagraph (C) of this paragraph:

(i) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels.

(ii) Solid waste from the extraction, beneficiation, and processing of ores and minerals, including phosphate rock and overburden from the mining of uranium ore.

(iii) Cement kiln dust waste.

“(B)(i) Owners and operators of disposal sites for wastes listed in subparagraph (A) may be required by the Administrator, through regulations prescribed under authority of section 2002 of this Act—

(I) as to disposal sites for such wastes which are to be closed, to identify the locations of such sites through surveying, platting, or other measures, together with recordation of such information on the public record, to assure that the locations where such wastes are disposed of are known and can be located in the future, and

(II) to provide chemical and physical analysis and composition of such wastes, based on available information, to be placed on the public record.

(ii)(I) In conducting any study under subsection (f), (n), (o), or (p), of section 8002 of this Act, any officer, employee, or authorized representative of the Environmental Protection Agency, duly designated by the Administrator, is authorized, at reasonable times and as reasonably necessary for the purposes of such study, to enter any establishment where any waste subject to such study is generated, stored, treated, disposed of, or transported from; to inspect, take samples, and conduct monitoring and testing; and to have access to and copy records relating to such waste. Each such inspection shall

be commenced and completed with reasonable promptness. If the officer, employee, or authorized representative obtains any samples prior to leaving the premises, he shall give to the owner, operator, or agent in charge a receipt describing the sample obtained and if requested a portion of each such sample equal in volume or weight to the portion retained. If any analysis is made of such samples, or monitoring and testing performed, a copy of the results shall be furnished promptly to the owner, operator, or agent in charge.

(II) Any records, reports, or information obtained from any person under subclause (I) shall be available to the public, except that upon a showing satisfactory to the Administrator by any person that records, reports, or information, or particular part thereof, to which the Administrator has access under this subparagraph if made public, would divulge information entitled to protection under section 1905 of title 18 of the United States Code, the Administrator shall consider such information or particular portion thereof confidential in accordance with the purposes of that section, except that such record, report, document, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this Act. Any person not subject to the provisions of section 1905 of title 18 of the United States Code who knowingly and willfully divulges or discloses any information entitled to protection under this subparagraph shall, upon conviction, be subject to a fine of not more than \$5,000 or to imprisonment not to exceed one year, or both.

(iii) The Administrator may prescribe regulations, under the authority of this Act, to prevent radiation exposure which presents an unreasonable risk to human health from the use in construction or land reclamation (with or without revegetation) of (I) solid waste from the extraction, beneficiation, and processing of phosphate rock or (II) overburden from the mining of uranium ore.

(iv) Whenever on the basis of any information the Administrator determines that any person is in violation of any requirement of this subparagraph, the Administrator shall give notice to the violator of his failure to comply with such requirement. If such violation extends beyond the thirtieth day after the Administrator's notification, the Administrator may issue an order requiring compliance within a specified time period or the Administrator may commence a civil action in the United States district court in the district in which the violation occurred for appropriate relief, including a temporary or permanent injunction.

(C) Not later than six months after the date of submission of the applicable study required to be conducted under subsection (f), (n), (o), or (p), of section 8002 of this Act, the Administrator shall, after public hearings and opportunity for comment, either determine to promulgate regulations under this subtitle for each waste listed in subparagraph (A) of this paragraph or determine that such regulations are unwarranted. The Administrator shall publish his determination, which shall be based on information developed or accumulated pursuant to such study, public hearings, and comment, in the Federal Register accompanied by an explanation and justification of the reasons for it.

(c) PETITION BY STATE GOVERNOR.—At any time after the date eighteen months after the enactment of this title, the Governor of

any State may petition the Administrator to identify or list a material as a hazardous waste. The Administrator shall act upon such petition within ninety days following his receipt thereof and shall notify the Governor of such action. If the Administrator denies such petition because of financial consideration, in providing such notice to the Governor he shall include a statement concerning such considerations.

(d) *SMALL QUANTITY GENERATOR WASTE.*—(1) By March 31, 1986, the Administrator shall promulgate standards under sections 3002, 3003, and 3004 for hazardous waste generated by a generator in a total quantity of hazardous waste greater than one hundred kilograms but less than one thousand kilograms during a calendar month.

(2) The standards referred to in paragraph (1), including standards applicable to the legitimate use, reuse, recycling, and reclamation of such wastes, may vary from the standards applicable to hazardous waste generated by larger quantity generators, but such standards shall be sufficient to protect human health and the environment.

(3) Not later than two hundred and seventy days after the enactment of the Hazardous and Solid Waste Amendments of 1984 any hazardous waste which is part of a total quantity generated by a generator generating greater than one hundred kilograms but less than one thousand kilograms during one calendar month and which is shipped off the premises on which such waste is generated shall be accompanied by a copy of the Environmental Protection Agency Uniform Hazardous Waste Manifest form signed by the generator. This form shall contain the following information:

(A) the name and address of the generator of the waste;

(B) the United States Department of Transportation description of the waste, including the proper shipping name, hazard class, and identification number (UN/NA), if applicable;

(C) the number and type of containers;

(D) the quantity of waste being transported; and

(E) the name and address of the facility designated to receive the waste.

If subparagraph (B) is not applicable, in lieu of the description referred to in such subparagraph (B), the form shall contain the Environmental Protection Agency identification number, or a generic description of the waste, or a description of the waste by hazardous waste characteristic. Additional requirements related to the manifest form shall apply only if determined necessary by the Administrator to protect human health and the environment.

(4) The Administrator's responsibility under this subtitle to protect human health and the environment may require the promulgation of standards under this subtitle for hazardous wastes which are generated by any generator who does not generate more than one hundred kilograms of hazardous waste in a calendar month.

(5) Until the effective date of standards required to be promulgated under paragraph (1), any hazardous waste identified or listed under section 3001 generated by any generator during any calendar month in a total quantity greater than one hundred kilograms but less than one thousand kilograms, which is not treated, stored, or disposed of at a hazardous waste treatment, storage, or disposal fa-

cility with a permit under section 3005, shall be disposed of only in a facility which is permitted, licensed, or registered by a State to manage municipal or industrial solid waste.

(6) Standards promulgated as provided in paragraph (1) shall, at a minimum, require that all treatment, storage, or disposal of hazardous wastes generated by generators referred to in paragraph (1) shall occur at a facility with interim status or a permit under this subtitle, except that onsite storage of hazardous waste generated by a generator generating a total quantity of hazardous waste greater than one hundred kilograms, but less than one thousand kilograms during a calendar month, may occur without the requirement of a permit for up to one hundred and eighty days. Such onsite storage may occur without the requirement of a permit for not more than six thousand kilograms for up to two hundred and seventy days if such generator must ship or haul such waste over two hundred miles.

(7)(A) Nothing in this subsection shall be construed to affect or impair the validity of regulations promulgated by the Secretary of Transportation pursuant to the Hazardous Materials Transportation Act.

(B) Nothing in this subsection shall be construed to affect, modify, or render invalid any requirements in regulations promulgated prior to January 1, 1983 applicable to any acutely hazardous waste identified or listed under section 3001 which is generated by any generator during any calendar month in a total quantity less than one thousand kilograms.

(8) Effective March 31, 1986, unless the Administrator promulgates standards as provided in paragraph (1) of this subsection prior to such date, hazardous waste generated by any generator in a total quantity greater than one hundred kilograms but less than one thousand kilograms during a calendar month shall be subject to the following requirements until the standards referred to in paragraph (1) of this subsection have become effective:

(A) the notice requirements of paragraph (3) of this subsection shall apply and in addition, the information provided in the form shall include the name of the waste transporters and the name and address of the facility designated to receive the waste;

(B) except in the case of the onsite storage referred to in paragraph (6) of this subsection, the treatment, storage, or disposal of such waste shall occur at a facility with interim status or a permit under this subtitle;

(C) generators of such waste shall file manifest exception reports as required of generators producing greater amounts of hazardous waste per month except that such reports shall be filed by January 31, for any waste shipment occurring in the last half of the preceding calendar year, and by July 31, for any waste shipment occurring in the first half of the calendar year; and

(D) generators of such waste shall retain for three years a copy of the manifest signed by the designated facility that has received the waste.

Nothing in this paragraph shall be construed as a determination of the standards appropriate under paragraph (1).

(9) The last sentence of section 3010(b) shall not apply to regulations promulgated under this subsection.

(e) **SPECIFIED WASTES.**—(1) Not later than 6 months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall, where appropriate, list under subsection (b)(1), additional waste containing chlorinated dioxins or chlorinated-dibenzofurans. Not later than one year after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall, where appropriate, list under subsection (b)(1) wastes containing remaining halogenated dioxins and halogenated-dibenzofurans.

(2) Not later than fifteen months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall make a determination of whether or not to list under subsection (b)(1) the following wastes: Chlorinated Aliphatics, Dioxin, Dimethyl Hydrazine, TDI (toluene diisocyanate), Carbamates, Bromacil, Linuron, Organo-bromines, solvents, refining wastes, chlorinated aromatics, dyes and pigments, inorganic chemical industry wastes, lithium batteries, coke byproducts, paint production waste, and coal slurry pipeline effluent.

(f) **DELISTING PROCEDURES.**—(1) When evaluating a petition to exclude a waste generated at a particular facility from listing under this section, the Administrator shall consider factors (including additional constituents) other than those for which the waste was listed if the Administrator has a reasonable basis to believe that such additional factors could cause the waste to be a hazardous waste. The Administrator shall provide notice and opportunity for comment on these additional factors before granting or denying such petition.

(2)(A) To the maximum extent practicable the Administrator shall publish in the Federal Register a proposal to grant or deny a petition referred to in paragraph (1) within twelve months after receiving a complete application to exclude a waste generated at a particular facility from being regulated as a hazardous waste and shall grant or deny such a petition within twenty-four months after receiving a complete application.

(B) The temporary granting of such a petition prior to the enactment of the Hazardous and Solid Waste Amendments of 1984 without the opportunity for public comment and the full consideration of such comments shall not continue for more than twenty-four months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984. If a final decision to grant or deny such a petition has not been promulgated after notice and opportunity for public comment within the time limit prescribed by the preceding sentence, any such temporary granting of such petition shall petition shall cease to be in effect.

(g) **EP TOXICITY.**—Not later than twenty-eight months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 the Administrator shall examine the deficiencies of the extraction procedure toxicity characteristic as a predictor of the leaching potential of wastes and make changes in the extraction procedure toxicity characteristic, including changes in the leaching media, as are necessary to insure that it accurately predicts the

leaching potential of wastes which pose a threat to human health and the environment when mismanaged.

(h) **ADDITIONAL CHARACTERISTICS.**—Not later than two years after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall promulgate regulations under this section identifying additional characteristics of hazardous waste, including measures or indicators of toxicity.

(i) **CLARIFICATION OF HOUSEHOLD WASTE EXCLUSION.**—A resource recovery facility recovering energy from the mass burning of municipal solid waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous waste for the purposes of regulation under this subtitle, if—

(1) such facility—

(A) receives and burns only—

(i) household waste (from single, and multiple dwellings, hotels, motels, and other residential sources) and

(ii) solid waste from commercial or industrial sources that does not contain hazardous waste identified or listed under this section, and

(B) does not accept hazardous wastes identified or listed under this section, and

(2) the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.

STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE

SEC. 3002. (a) **IN GENERAL.**—Not later than eighteen months after the date of the enactment of this section, and after notice and opportunity for public hearings and after consultation with appropriate Federal and State agencies, the Administrator shall promulgate regulations establishing such standards applicable to generators of hazardous waste identified or listed under this subtitle, as may be necessary to protect human health and the environment. Such standards shall establish requirements respecting—

(1) recordkeeping practices that accurately identify the quantities of such hazardous waste generated, the constituents thereof which are significant in quantity or in potential harm to human health or the environment, and the disposition of such waste;

(2) labeling practices for any containers used for the storage, transport, or disposal of such hazardous waste such as will identify accurately such waste;

(3) use of appropriate containers for such hazardous waste;

(4) furnishing of information on the general chemical composition of such hazardous waste to persons transporting, treating, storing, or disposing of such wastes;

(5) use of a manifest system and any other reasonable means necessary to assure that all such hazardous waste generated is designated for treatment, storage, or disposal in and arrives at, treatment, storage, or disposal facilities (other than facilities on the premises where the waste is generated) for which a permit has been issued as provided in this subtitle, or pursuant

to title I of the Marine Protection, Research, and Sanctuaries Act (86 Stat. 1052), and

[(6) submission of reports to the Administrator (or the State agency in any case in which such agency carries out an authorized permit program pursuant to this subtitle) at such times as the Administrator (or the State agency if appropriate) deems necessary, setting out—

[(A) the quantities of hazardous waste identified or listed under this subtitle that he has generated during a particular time period; and

[(B) the disposition of all hazardous waste reported under subparagraph (A).]

(6) submission of reports to the Administrator (or the State agency in any case in which such agency carries out a permit program pursuant to this subtitle) at least once every two years, setting out—

(A) the quantities and nature of hazardous waste identified or listed under this subtitle that he has generated during the year;

(B) the disposition of all hazardous waste reported under subparagraph (A);

(C) the efforts undertaken during the year to reduce the volume and toxicity of waste generated; and

(D) the changes in volume and toxicity of waste actually achieved during the year in question in comparison with previous years, to the extent such information is available for years prior to enactment of the Hazardous and Solid Waste Amendments of 1984.

(b) WASTE MINIMIZATION.—Effective September 1, 1985, the manifest required by subsection (a)(5) shall contain a certification by the generator that—

(1) the generator of the hazardous waste has a program in place to reduce the volume or quantity and toxicity of such waste to the degree determined by the generator to be economically practicable; and

(2) the proposed method of treatment, storage, or disposal is that practicable method currently available to the generator which minimizes the present and future threat to human health and the environment.

STANDARDS APPLICABLE TO TRANSPORTERS OF HAZARDOUS WASTE

SEC. 3003. (a) STANDARDS.—Not later than eighteen months after the date of enactment of this section, and after opportunity for public hearings, the Administrator, after consultation with the Secretary of Transportation and the States, shall promulgate regulations establishing such standards, applicable to transporters of hazardous waste identified or listed under this subtitle, as may be necessary to protect human health and the environment. Such standards shall include but need not be limited to requirements respecting—

(1) recordkeeping concerning such hazardous waste transported, and their source and delivery points;

(2) transportation of such waste only if properly labeled;

(3) compliance with the manifest system referred to in section 3002(5); and

(4) transportation of all such hazardous waste only to the hazardous waste treatment, storage, or disposal facilities which the shipper designates on the manifest form to be a facility holding a permit issued under this subtitle, or pursuant to title I of the Marine Protection, Research, and Sanctuaries Act (86 Stat. 1052).

(b) **COORDINATION WITH REGULATIONS OF SECRETARY OF TRANSPORTATION.**—In case of any hazardous waste identified or listed under this subtitle which is subject to the Hazardous Materials Transportation Act (88 Stat. 2156; 49 U.S.C. 1801 and following), the regulations promulgated by the Administrator under this section shall be consistent with the requirements of such Act and the regulations thereunder. The Administrator is authorized to make recommendations to the Secretary of Transportation respecting the regulations of such hazardous waste under the Hazardous Materials Transportation Act and for addition of materials to be covered by such Act.

(c) **FUEL FROM HAZARDOUS WASTE.**—*Not later than two years after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, and after opportunity for public hearing, the Administrator shall promulgate regulations establishing standards, applicable to transporters of fuel produced (1) from any hazardous waste identified or listed under section 3001, or (2) from any hazardous waste identified or listed under section 3001 and any other material, as may be necessary to protect human health and the environment. Such standards may include any of the requirements set forth in paragraphs (1) through (4) of subsection (a) as may be appropriate.*

STANDARDS APPLICABLE TO OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

SEC. 3004. (a) IN GENERAL.—Not later than eighteen months after the date of enactment of this section, and after opportunity for public hearings and after consultation with appropriate Federal and State agencies, the Administrator shall promulgate regulations establishing such performance standards, applicable to owners and operators of facilities for the treatment, storage, or disposal of hazardous waste identified or listed under this subtitle, as may be necessary to protect human health and the environment. In establishing such standards the Administrator shall, where appropriate, distinguish in such standards between requirements appropriate for new facilities and for facilities in existence on the date of promulgation of such regulations. Such standards shall include, but need not be limited to, requirements respecting—

(1) maintaining records of all hazardous wastes identified or listed under this title which is treated, stored or disposed of, as the case may be, and the manner in which such wastes were treated, stored, or disposed of;

(2) satisfactory reporting, monitoring, and inspection and compliance with the manifest system referred to in section 3002(5);

(3) treatment, storage, or disposal of all such waste received by the facility pursuant to such operating methods, techniques, and practices as may be satisfactory to the Administrator;

(4) the location, design, and construction of such hazardous waste treatment, disposal, or storage facilities;

(5) contingency plans for effective action to minimize anticipated damage from any treatment, storage, or disposal of any such hazardous waste;

(6) the maintenance of operation of such facilities and requiring such additional qualifications as to ownership, continuity of operation, training for personnel, and financial responsibility (*including financial responsibility for corrective action*) as may be necessary or desirable; and

(7) compliance with the requirements of section 3005 respecting permits for treatment, storage, or disposal.

No private entity shall be precluded by reason of criteria established under paragraph (6) from the ownership or operation of facilities providing hazardous waste treatment, storage, or disposal services where such entity can provide assurances of financial responsibility and continuity of operation consistent with the degree and duration of risks associated with the treatment, storage, or disposal of specified hazardous waste.

(b) **SALT DOME FORMATIONS, SALT BED FORMATIONS, UNDERGROUND MINES AND CAVES.**—(1) *Effective on the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, the placement of any noncontainerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground mine, or cave is prohibited until such time as—*

(A) *the Administrator has determined, after notice and opportunity for hearings on the record in the affected areas, that such placement is protective of human health and the environment;*

(B) *the Administrator has promulgated performance and permitting standards for such facilities under this subtitle, and;*

(C) *a permit has been issued under section 3005(c) for the facility concerned.*

(2) *Effective on the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the placement of any hazardous waste other than a hazardous waste referred to in paragraph (1) in a salt dome formation, salt bed formation, underground mine, or cave is prohibited until such time as a permit has been issued under section 3005(c) for the facility concerned.*

(3) *No determination made by the Administrator under subsection (d), (e), or (g) of this section regarding any hazardous waste to which such subsection (d), (e), or (g) applies shall affect the prohibition contained in paragraph (1) or (2) of this subsection.*

(4) *Nothing in this subsection shall apply to the Department of Energy Waste Isolation Pilot Project in New Mexico.*

(c) **LIQUIDS IN LANDFILLS.**—(1) *Effective 6 months after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, the placement of bulk or noncontainerized liquid hazardous waste or free liquids contained in hazardous waste (whether or not absorbents have been added) in any landfill is prohibited. Prior to such date the requirements (as in effect on April 30, 1983) promul-*

gated under this section by the Administrator regarding and liquid hazardous waste shall remain in force and effect to the extent such requirements are applicable to the placement of bulk or noncontainerized liquid hazardous waste, or free liquids contained in hazardous waste, in landfills.

(2) Not later than fifteen months after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall promulgate final regulations which—

(A) minimize the disposal of containerized liquid hazardous waste in landfills, and

(B) minimize the presence of free liquids in containerized hazardous waste to be disposed of in landfills.

Such regulations shall also prohibit the disposal in landfills of liquids that have been absorbed in materials that biodegrade or that release liquids when compressed as might occur during routine landfill operations. Prior to the date on which such final regulations take effect, the requirements (as in effect on April 30, 1983) promulgated under this section by the Administrator shall remain in force and effect to the extent such requirements are applicable to the disposal of containerized liquid hazardous waste, or free liquids contained in hazardous waste in landfills.

(3) Effective twelve months after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, the placement of any liquid which is not a hazardous waste in a landfill for which a permit is required under section 3005(c) or which is operating pursuant to interim status granted under section 3005(e) is prohibited unless the owner or operator of such landfill demonstrates to the Administrator, or the Administrator determines, that—

(A) the only reasonably available alternative to the placement in such landfill is placement in a landfill or unlined surface impoundment, whether or not permitted under section 3005(c) or operating pursuant to interim status under section 3005(e), which contains, or may reasonably be anticipated to contain, hazardous waste; and

(B) placement in such owner or operator's landfill will not present a risk of contamination of any underground source of drinking water.

As used in subparagraph (B), the term "underground source of drinking water" has the same meaning as provided in regulations under the Safe Drinking Water Act (title XIV of the Public Health Service Act).

(4) No determination made by the Administrator under subsection (d), (e), or (g) of this section regarding any hazardous waste to which such subsection (d), (e), or (g) applies shall affect the prohibition contained in paragraph (1) of this subsection.

(d) PROHIBITIONS ON LAND DISPOSAL OF SPECIFIED WASTES.—(1) Effective 32 months after the enactment of the Hazardous and Solid Waste Amendments of 1984 (except as provided in subsection (f) with respect to underground injection into deep injection wells), the land disposal of the hazardous wastes referred to in paragraph (2) is prohibited unless the Administrator determines the prohibition on one or more methods of land disposal of such waste is not required in order to protect human health and the environment for as long as the waste remains hazardous, taking into account—

(A) the long-term uncertainties associated with land disposal,
 (B) the goal of managing hazardous waste in an appropriate manner in the first instance, and

(C) the persistence, toxicity, mobility, and propensity to bioaccumulate of such hazardous wastes and their hazardous constituents.

For the purposes of this paragraph, a method of land disposal may not be determined to be protective of human health and the environment for a hazardous waste referred to in paragraph (2) (other than a hazardous waste which has complied with the pretreatment regulations promulgated under subsection (m)), unless, upon application by an interested person, it has been demonstrated to the Administrator, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous.

(2) Paragraph (1) applies to the following hazardous wastes listed or identified under section 3001:

(A) Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing free cyanides at concentrations greater than or equal to 1,000 mg/l.

(B) Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing the following metals (or elements) or compounds of these metals (or elements) at concentrations greater than or equal to those specified below:

(i) arsenic and/or compounds (as As) 500 mg/l;

(ii) cadmium and/or compounds (as Cd) 100 mg/l;

(iii) chromium (VI and/or compounds (as Cr VI) 500 mg/l;

(iv) lead and/or compounds (as Pb) 500 mg/l;

(v) mercury and/or compounds (as Hg) 20 mg/l;

(vi) nickel and/or compounds (as Ni) 134 mg/l;

(vii) selenium and/or compounds (as Se) 100 mg/l; and

(viii) thallium and/or compounds (as Th) 130 mg/l.

(C) Liquid hazardous waste having a pH less than or equal to two (2.0).

(D) Liquid hazardous wastes containing polychlorinated biphenyls at concentrations greater than or equal to 50 ppm.

(E) Hazardous wastes containing halogenated organic compounds in total concentration greater than or equal to 1,000 mg/kg.

When necessary to protect human health and the environment, the Administrator shall substitute more stringent concentration levels than the levels specified in subparagraphs (A) through (E).

(3) During the period ending forty-eight months after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, this subsection shall not apply to any disposal of contaminated soil or debris resulting from a response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 or a corrective action required under this subtitle.

(e) SOLVENTS AND DIOXINS.—(1) Effective twenty-four months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 (except as provided in subsection (f) with respect to underground injection into deep injection wells), the land disposal

of the hazardous wastes referred to in paragraph (2) is prohibited unless the Administrator determines the prohibition of one or more methods of land disposal of such waste is not required in order to protect human health and the environment for as long as the waste remains hazardous, taking into account the factors referred to in subparagraph (A) through (C) of subsection (d)(1). For the purposes of this paragraph, a method of land disposal may not be determined to be protective of human health and the environment for a hazardous waste referred to in paragraph (2) (other than a hazardous waste which has complied with the pretreatment regulations promulgated under subsection (m)), unless upon application by an interested person it has been demonstrated to the Administrator, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous.

(2) The hazardous wastes to which the prohibition under paragraph (1) applies are as follows—

(A) dioxin-containing hazardous wastes numbered F020, F021, F022, and F023 (as referred to in the proposed rule published by the Administrator in the Federal Register for April 4, 1983), and

(B) those hazardous wastes numbered F001, F002, F003, F004, and F005 in regulations promulgated by the Administrator under section 3001 (40 C.F.R. 261.31 (July 1, 1983)), as those regulations are in effect on July 1, 1983.

(3) During the period ending forty-eight months after the date of the enactment of Hazardous and Solid Waste Amendments of 1984, this subsection shall not apply to any disposal of contaminated soil or debris resulting from a response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 or a corrective action required under this subtitle.

(f) **DISPOSAL INTO DEEP INJECTION WELLS; SPECIFIED SUBSECTION (d) WASTES; SOLVENTS AND DIOXINS.**—(1) Not later than forty-five months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall complete a review of the disposal of all hazardous wastes referred to in paragraph (2) of subsection (d) and in paragraph (2) of subsection (e) by underground injection into deep injection wells.

(2) Within forty-five months after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall make a determination regarding the disposal by underground injection into deep injection wells of the hazardous wastes referred to in paragraph (2) of subsection (d) and the hazardous wastes referred to in paragraph (2) of subsection (e). The Administrator shall promulgate final regulations prohibiting the disposal of such wastes into such wells if it may reasonably be determined that such disposal may not be protective of human health and the environment for as long as the waste remains hazardous, taking into account the factors referred to in subparagraphs (A) through (C) of subsection (d)(1). In promulgating such regulations, the Administrator shall consider each hazardous waste referred to in paragraph (2) of subsection (d) or in paragraph (2) of subsection (e) which is prohibited from disposal into such wells by any State.

(3) If the Administrator fails to make a determination under paragraph (2) for any hazardous waste referred to in paragraph (2) of subsection (d) or in paragraph (2) of subsection (e) within forty-five months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, such hazardous waste shall be prohibited from disposal into any deep injection well.

(4) As used in this subsection, the term "deep injection well" means a well used for the underground injection of hazardous waste other than a well to which section 7010(a) applies.

(g) **ADDITIONAL LAND DISPOSAL PROHIBITION DETERMINATIONS.**—

(1) Not later than twenty-four months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall submit a schedule to Congress for—

(A) reviewing all hazardous wastes listed (as of the date of the enactment of the Hazardous and Solid Waste Amendments of 1984) under section 3001 other than those wastes which are referred to in subsection (d) or (e); and

(B) taking action under paragraph (5) of this subsection with respect to each such hazardous waste.

(2) The Administrator shall base the schedule on a ranking of such listed wastes considering their intrinsic hazard and their volume such that decisions regarding the land disposal of high volume hazardous wastes with high intrinsic hazard shall, to the maximum extent possible, be made by the date forty-five months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984. Decisions regarding low volume hazardous wastes with lower intrinsic hazard shall be made by the date sixty-six months after such date of enactment.

(3) The preparation and submission of the schedule under this subsection shall not be subject to the Paperwork Reduction Act of 1980. No hearing on the record shall be required for purposes of preparation or submission of the schedule. The schedule shall not be subject to judicial review.

(4) The schedule under this subsection shall require that the Administrator shall promulgate regulations in accordance with paragraph (5) or make a determination under paragraph (5)—

(A) for at least one-third of all hazardous wastes referred to in paragraph (1) by the date forty-five months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984;

(B) for at least two-thirds of all such listed wastes by the date fifty-five months after the date of enactment of such Amendments; and

(C) for all such listed wastes and for all hazardous wastes identified under 3001 by the date sixty-six months after the date of enactment of such Amendments.

In the case of any hazardous waste identified or listed under section 3001 after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall determine whether such waste shall be prohibited from one or more methods of land disposal in accordance with paragraph (5) within six months after the date of such identification or listing.

(5) Not later than the date specified in the schedule published under this subsection, the Administrator shall promulgate final reg-

ulations prohibiting one or more methods of land disposal of the hazardous wastes listed on such schedule except for methods of land disposal which the Administrator determines will be protective of human health and the environment for as long as the waste remains hazardous, taking into account the factors referred to in subparagraph (A) through (C) of subsection (d)(1). For the purposes of this paragraph, a method of land disposal may not be determined to be protective of human health and the environment (except with respect to a hazardous waste which has complied with the pretreatment regulations promulgated under subsection (m)) unless, upon application by an interested person, it has been demonstrated to the Administrator, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous.

(6)(A) If the Administrator fails (by the date forty-five months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984) to promulgate regulations or make a determination under paragraph (5) for any hazardous waste which is included in the first one-third of the schedule published under this subsection, such hazardous waste may be disposed of in a landfill or surface impoundment only if—

(i) such facility is in compliance with the requirements of subsection (o) which are applicable to new facilities (relating to minimum technological requirements); and

(ii) prior to such disposal, the generator has certified to the Administrator that such generator has investigated the availability of treatment capacity and has determined that the use of such landfill or surface impoundment is the only practical alternative to treatment currently available to the generator.

The prohibition contained in this subparagraph shall continue to apply until the Administrator promulgates regulations or makes a determination under paragraph (5) for the waste concerned.

(B) If the Administrator fails (by the date 55 months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984) to promulgate regulations or make a determination under paragraph (5) for any hazardous waste which is included in the first two-thirds of the schedule published under this subsection, such hazardous waste may be disposed of in a landfill or surface impoundment only if—

(i) such facility is in compliance with the requirements of subsection (o) which are applicable to new facilities (relating to minimum technological requirements); and

(ii) prior to such disposal, the generator has certified to the Administrator that such generator has investigated the availability of treatment capacity and has determined that the use of such landfill or surface impoundment is the only practical alternative to treatment currently available to the generator.

The prohibition contained in this subparagraph shall continue to apply until the Administrator promulgates regulations or makes a determination under paragraph (5) for the waste concerned.

(C) If the Administrator fails to promulgate regulations, or make a determination under paragraph (5) for any hazardous waste referred to in paragraph (1) within 66 months after the date of enact-

ment of the Hazardous and Solid Waste Amendments of 1984, such hazardous waste shall be prohibited from land disposal.

(h) **VARIANCES FROM LAND DISPOSAL PROHIBITIONS.**—(1) A prohibition in regulations under subsection (d), (e), (f), or (g) shall be effective immediately upon promulgation.

(2) The Administrator may establish an effective date different from the effective date which would otherwise apply under subsection (d), (e), (f), or (g) with respect to a specific hazardous waste which is subject to a prohibition under subsection (d), (e), (f), or (g) or under regulations under subsection (d), (e), (f), or (g). Any such other effective date shall be established on the basis of the earliest date on which adequate alternative treatment, recovery, or disposal capacity which protects human health and the environment will be available. Any such other effective date shall in no event be later than 2 years after the effective date of the prohibition which would otherwise apply under subsection (d), (e), (f), or (g).

(3) The Administrator, after notice and opportunity for comment and after consultation with appropriate State agencies in all affected States, may on a case-by-case basis grant an extension of the effective date which would otherwise apply under subsection (d), (e), (f), or (g) or under paragraph (2) for up to one year, where the applicant demonstrates that there is a binding contractual commitment to construct or otherwise provide such alternative capacity but due to circumstances beyond the control of such applicant such alternative capacity cannot reasonably be made available by such effective date. Such extension shall be renewable once for no more than one additional year.

(4) Whenever another effective date (hereinafter referred to as a "variance") is established under paragraph (2), or an extension is granted under paragraph (3), with respect to any hazardous waste, during the period for which such variance or extension is in effect, such hazardous waste may be disposed of in a landfill or surface impoundment only if such facility is in compliance with the requirements of subsection (o).

(i) **PUBLICATION OF DETERMINATION.**—If the administrator determines that a method of land disposal will be protective of human health and the environment, he shall promptly publish in the Federal Register notice of such determination, together with an explanation of the basis for such determination.

(j) **STORAGE OF HAZARDOUS WASTE PROHIBITED FROM LAND DISPOSAL.**—In the case of any hazardous waste which is prohibited from one or more methods of land disposal under this section (or under regulations promulgated by the administrator under any provision of this section) the storage of such hazardous waste is prohibited unless such storage is solely for the purpose of the accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, Treatment or disposal.

(k) **DEFINITION OF LAND DISPOSAL.**—For the purposes of this section, the term "land disposal", when used with respect to a specified hazardous waste, shall be deemed to include, but not be limited to, any placement of such hazardous waste in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, or underground mine or cave.

(l) **BAN ON DUST SUPPRESSION.**—The use of waste or used oil or other material, which is contaminated or mixed with dioxin or any other hazardous waste identified or listed under section 3001 (other than a waste identified solely on the basis of ignitability), for dust suppression or road treatment is prohibited.

(m) **TREATMENT STANDARDS FOR WASTES SUBJECT TO LAND DISPOSAL PROHIBITION.**—(1) Simultaneously with the promulgation of regulations under subsection (d), (e), (f), or (g) prohibiting one or more methods of land disposal of a particular hazardous waste, and as appropriate thereafter, the Administrator shall, after notice and an opportunity for hearings and after consultation with appropriate Federal and State agencies, promulgate regulations specifying those levels or methods of treatment, if any, which substantially diminish the toxicity of the waste or substantially reduce the likelihood of migration of hazardous constituents from the waste so that short-term and long-term threats to human health and the environment are minimized.

(2) If such hazardous waste has been treated to the level or by a method specified in regulations promulgated under this subsection, such waste or residue thereof shall not be subject to any prohibition promulgated under subsection (d), (e), (f), or (g) and may be disposed of in a land disposal facility which meets the requirements of this subtitle. Any regulations promulgated under this subsection for a particular hazardous waste shall become effective on the same date as any applicable prohibition promulgated under subsection (d), (e), (f), or (g).

(n) **AIR EMISSIONS.**—Not later than thirty months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall promulgate such regulations for the monitoring and control of air emissions at hazardous waste treatment, storage, and disposal facilities, including but not limited to open tanks, surface impoundments, and landfills, as may be necessary to protect human health and the environment.

(o) **MINIMUM TECHNOLOGICAL REQUIREMENTS.**—The regulations under subsection (a) of this section shall be revised from time to time to take into account improvements in the technology of control and measurement. At a minimum, such regulations shall require, and a permit issued pursuant to section 3005(c) after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 by the Administrator or a State shall require—

(A) for each new landfill or surface impoundment, each new landfill or surface impoundment unit at an existing facility, each replacement of an existing landfill or surface impoundment unit, and each lateral expansion of an existing landfill or surface impoundment unit, for which an application for a final determination regarding issuance of a permit under section 3005(c) is received after the date of enactment of the Hazardous and Solid Waste Amendments of 1984—

(i) the installation of two or more liners and a leachate collection system above (in the case of a landfill) and between such liners; and

(ii) ground water monitoring.

(B) for each incinerator which receives a permit under section 3005(c) after the date of enactment of the Hazardous and Solid

Waste Amendments of 1984, the attainment of the minimum destruction and removal efficiency required by regulations in effect on June 24, 1982.

The requirements of this paragraph shall apply with respect to all waste received after the issuance of the permit.

(2) Paragraph (1)(A)(i) shall not apply if the owner or operator demonstrates to the Administrator, and the Administrator finds for such landfill or surface impoundment, that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents into the ground water or surface water at least as effectively as such liners and leachate collection systems.

(3) The double-liner requirement set forth in paragraph (1)(A)(i) may be waived by the Administrator for any monofill, if—

(A) such monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand,

(B) such wastes do not contain constituents which would render the wastes hazardous for reasons other than the Extraction Procedure ("EP") toxicity characteristics set forth in regulations under this subtitle, and

(C) such monofill meets the same requirements as are applicable in the case of a waiver under section 3005(j) (2) or (4).

(4)(A) Not later than thirty months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall promulgate standards requiring that new landfill units, surface impoundment units, waste piles, underground tanks and land treatment units for the storage, treatment, or disposal of hazardous waste identified or listed under section 3001 shall be required to utilize approved leak detection systems.

(B) For the purposes of subparagraph (A)—

(i) the term "approved leak detection system" means a system or technology which the Administrator determines to be capable of detecting leaks of hazardous constituents at the earliest practicable time; and

(ii) the term "new units" means units on which construction commences after the date of promulgation of regulations under this paragraph.

(5)(A) The Administrator shall promulgate regulations or issue guidance documents implementing the requirements of paragraph (1)(A) within two years after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984.

(B) Until the effective date of such regulations or guidance documents, the requirement for the installation of two or more liners may be satisfied by the installation of a top liner designed, operated, and constructed of materials to prevent the migration of any constituent into such liner during the period such facility remains in operation (including any post-closure monitoring period), and a lower liner designed, operated and constructed to prevent the migration of any constituent through such liner during such period. For the purpose of the preceding sentence, a lower liner shall be deemed to satisfy such requirement if it is constructed of at least a 3-foot thick layer of recompacted clay or other natural material with a permeability of no more than 1×10^{-7} centimeter per second.

(6) Any permit under section 3005 which is issued for a landfill located within the State of Alabama shall require the installation of two or more liners and a leachate collection system above and between such liners, notwithstanding any other provision of this Act.

(7) In addition to the requirements set forth in this subsection, the regulations referred to in paragraph (1) shall specify criteria for the acceptable location of new and existing treatment storage, or disposal facilities as necessary to protect human health and the environment. Within 18 months after the enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall publish guidance criteria identifying areas of vulnerable hydrogeology.

(p) **GROUND WATER MONITORING.**—The standards under this section concerning ground water monitoring which are applicable to surface impoundments, waste piles, land treatment units, and landfills shall apply to such a facility whether or not—

(1) the facility is located above the seasonal high water table;

(2) two liners and a leachate collection system have been installed at the facility; or

(3) the owner or operator inspects the liner (or liners) which has been installed at the facility.

This subsection shall not be construed to affect other exemptions or waivers from such standards provided in regulations in effect on the date of enactment of the Hazardous and Solid Waste Amendments of 1984 or as may be provided in revisions to those regulations, to the extent consistent with this subsection. The Administrator is authorized on a case-by-case basis to exempt from ground water monitoring requirements under this section (including subsection (o)) any engineered structure which the Administrator finds does not receive or contain liquid waste (nor waste containing free liquids), is designed and operated to exclude liquid from precipitation or other runoff, utilizes multiple leak detection systems within the outer layer of containment, and provides for continuing operation and maintenance of these leak detection systems during the operating period, closure, and the period required for post-closure monitoring and for which the Administrator concludes on the basis of such findings that there is a reasonable certainty hazardous constituents will not migrate beyond the outer layer of containment prior to the end of the period required for post-closure monitoring.

(q) **HAZARDOUS WASTE USED AS FUEL.**—(1) Not later than two years after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, and after notice and opportunity for public hearing, the Administrator shall promulgate regulations establishing such—

(A) standards applicable to the owners and operators of facilities which produce a fuel—

(i) from any hazardous waste identified or listed under section 3001, or

(ii) from any hazardous waste identified or listed under section 3001 of any other material;

(B) standards applicable to the owners and operators of facilities which burn, for purposes of energy recovery, any fuel produced as provided in subparagraph (A) or any fuel which otherwise contains any hazardous waste identified or listed under section 3001; and

(C) standards applicable to any person who distributes or markets any fuel which is produced as provided in subparagraph (A) or any fuel which otherwise contains any hazardous waste identified or listed under section 3001

as may be necessary to protect human health and the environment. Such standards may include any of the requirements set forth in paragraphs (1) through (7) of subsection (a) as may be appropriate. Nothing in this subsection shall be construed to affect or impair the provisions of section 3001(b)(3). For purposes of this subsection, the term "hazardous waste listed under section 3001" includes any commercial product which is listed under section 3001 and which, in lieu of its original intended use, is (i) produced for use as (or as a component of) a fuel, (ii) distributed for use as a fuel, or (iii) burned as a fuel.

(2)(A) This subsection, subsection (r), and subsection (s) shall not apply to petroleum refinery wastes containing oil which are converted into petroleum coke at the same facility at which such wastes were generated, unless the resulting coke product would exceed one or more characteristics by which a substance would be identified as a hazardous waste under section 3001.

(B) The Administrator may exempt from the requirements of this subsection, subsection (r), or subsection (s) facilities which burn de minimis quantities of hazardous waste as fuel, as defined by the Administrator, if the wastes are burned at the same facility at which such wastes are generated; the waste is burned to recover useful energy, as determined by the Administrator on the basis of the design and operating characteristics of the facility and the heating value and other characteristics of the waste; and the waste is burned in a type of device determined by the Administrator to be designed and operated at a destruction and removal efficiency sufficient such that protection of human health and environment is assured.

(C)(i) After the date of the enactment of the Hazardous and Solid Waste Amendments of 1984 and until standards are promulgated and in effect under paragraph (2) of this subsection, no fuel which contains any hazardous waste may be burned in any cement kiln which is located within the boundaries of any incorporated municipality with a population greater than five hundred thousand (based on the most recent census statistics) unless such kiln fully complies with regulations (as in effect on the date of the enactment of the Hazardous and Solid Waste Amendments of 1984) under the subtitle which are applicable to incinerators.

(ii) Any person who knowingly violates the prohibition contained in clause (i) shall be deemed to have violated section 3008(d)(2).

(r) LABELING.—(1) Notwithstanding any other provision of law, until such time as the Administrator promulgates standards under subsection (q) specifically superceding this requirement, it shall be unlawful for any person who is required to file a notification in accordance with paragraph (1) or (3) of section 3010 to distribute or market any fuel which is produced from any hazardous waste identified or listed under section 3001, or any fuel which otherwise contains any hazardous waste identified or listed under section 3001 if the invoice or the bill of sale fails—

(A) to bear the following statement: "WARNING: THIS FUEL CONTAINS HAZARDOUS WASTES", and

(B) to list the hazardous wastes contained therein.

Beginning ninety days after the enactment of the Hazardous and Solid Waste Amendments of 1984, such statement shall be located in a conspicuous place on every such invoice or bill of sale and shall appear in conspicuous and legible type in contrast by typography, layouts, or color with other printed matter on the invoice or bill of sale.

(2) Unless the Administrator determines otherwise as may be necessary to protect human health and the environment, this subsection shall not apply to fuels produced from petroleum refining waste containing oil if—

(A) such materials are generated and reinserted onsite into the refining process;

(B) contaminants are removed; and

(C) such refining waste containing oil is converted along with normal process streams into petroleum-derived fuel products at a facility at which crude oil is refined into petroleum products and which is classified as a number SIC 2911 facility under the Office of Management and Budget Standard Industrial Classification Manual.

(3) Unless the Administrator determines otherwise as may be necessary to protect human health and the environment, this subsection shall not apply to fuels produced from oily materials, resulting from normal petroleum refining, production and transportation practices, if (A) contaminants are removed; and (B) such oily materials are converted along with normal process streams into petroleum-derived fuel products at a facility at which crude oil is refined into petroleum products and which is classified as a number SIC 2911 facility under the Office of Management and Budget Standard Classification Manual.

(s) **RECORDKEEPING.**—Not later than fifteen months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall promulgate regulations requiring that any person who is required to file a notification in accordance with subparagraph (1), (2), or (3), of section 3010(a) shall maintain such records regarding fuel blending, distribution, or use as may be necessary to protect human health and the environment.

(t) **FINANCIAL RESPONSIBILITY PROVISIONS.**—(1) Financial responsibility required by subsection (a) of this section may be established in accordance with regulations promulgated by the Administrator by any one, or any combination, of the following: insurance, guarantee, surety bond, letter of credit, or qualification as a self-insurer. In promulgating requirements under this section, the Administrator is authorized to specify policy or other contractual terms, conditions, or defenses which are necessary or are unacceptable in establishing such evidence of financial responsibility in order to effectuate the purposes of this Act.

(2) In any case where the owner or operator is in bankruptcy, reorganization, or arrangement pursuant to the Federal Bankruptcy Code or where (with reasonable diligence) jurisdiction in any State court or any Federal Court cannot be obtained over an owner or operator likely to be solvent at the time of judgment, any claim arising

from conduct for which evidence of financial responsibility must be provided under this section may be asserted directly against the guarantor providing such evidence of financial responsibility. In the case of any action pursuant to this subsection, such guarantor shall be entitled to invoke all rights and defenses which would have been available to the owner or operator if any action had been brought against the owner or operator by the claimant and which would have been available to the guarantor if an action had been brought against the guarantor by the owner or operator.

(3) The total liability of any guarantor shall be limited to the aggregate amount which the guarantor has provided as evidence of financial responsibility to the owner or operator under this Act. Nothing in this subsection shall be construed to limit any other State or Federal statutory, contractual or common law liability of a guarantor to its owner or operator including, but not limited to, the liability of such guarantor for bad faith either in negotiating or in failing to negotiate the settlement of any claim. Nothing in this subsection shall be construed to diminish the liability of any person under section 107 or 111 of the Comprehensive environmental Response, Compensation and Liability Act of 1980 or other applicable law.

(4) For the purpose of this subsection, the term "guarantor" means any person, other than the owner or operator, who provides evidence of financial responsibility for an owner or operator under this section.

(u) **CONTINUING RELEASES AT PERMITTED FACILITIES.**—Standards promulgated under this section shall require, and a permit issued after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 by the Administrator or a State shall require, corrective action for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage, or disposal facility seeking a permit under this subtitle, regardless of the time at which waste was placed in such unit. Permits issued under section 3005 shall contain schedules of compliance for such corrective action (which such corrective action cannot be completed prior to issuance of the permit) and assurances of financial responsibility for completing such corrective action.

(v) **CORRECTIVE ACTIONS BEYOND FACILITY BOUNDARY.**—As promptly as practicable after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall amend the standards under this section regarding corrective action required at facilities for the treatment, storage, or disposal, of hazardous waste listed or identified under section 3001 to require that corrective action be taken beyond the facility boundary where necessary to protect human health and the environment unless the owner or operator of the facility concerned demonstrates to the satisfaction of the Administrator that, despite the owner or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. Such regulations shall take effect immediately upon promulgation, notwithstanding section 3010(b), and shall apply to—

(1) all facilities operating under permits issued under subsection (c), and

(2) all landfills, surface impoundments, and waste pile units (including any new units, replacements of existing units, or lateral expansions of existing units) which receive hazardous waste after July 26, 1982.

Pending promulgation of such regulations, the Administrator shall issue corrective action orders for facilities referred to in paragraphs (1) and (2), on a case-by-case basis, consistent with the purposes of this subsection.

(w) **UNDERGROUND TANKS.**—Not later than March 1, 1985, the Administrator shall promulgate final permitting standards under this section for underground tanks that cannot be entered for inspection. Within forty-eight months after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, such standards shall be modified, if necessary, to cover at a minimum all requirements and standards described in section 9003.

(x) If (1) solid waste from the extraction, beneficiation or processing of ores and minerals, including phosphate rock and overburden from the mining of uranium, (2) fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels, or (3) cement kiln dust waste, is subject to regulation under this subtitle, the Administrator is authorized to modify the requirements of subsections (c), (d), (e), (f), (g), (o), and (u) and section 3005(j), in the case of landfills or surface impoundments receiving such solid waste, to take into account the special characteristics of such wastes, the practical difficulties associated with implementation of such requirements, and site-specific characteristics, including but not limited to the climate, geology, hydrology and soil chemistry at the site, so long as such modified requirements assure protection of human health and the environment.

PERMITS FOR TREATMENT, STORAGE, OR DISPOSAL OF HAZARDOUS WASTE

SEC. 3005. (a) PERMIT REQUIREMENTS.—Not later than eighteen months after the date of the enactment of this section, the Administrator shall promulgate regulations requiring each person owning or operating **[a]** an existing facility or planning to construct a new facility for the treatment, storage, or disposal of hazardous waste identified or listed under this subtitle to have a permit issued pursuant to this section. Such regulations shall take effect on the date provided in section 3010 and upon and after such date the treatment storage or disposal of any such hazardous waste and the construction of any new facility for the treatment, storage, or disposal of any such hazardous waste is prohibited except in accordance with such a permit. No permit shall be required under this section in order to construct a facility if such facility is constructed pursuant to an approval issued by the Administrator under section 6(e) of the Toxic Substances Control Act for the incineration of polychlorinated biphenyls and any person owning or operating such a facility may, at any time after operation or construction of such facility has begun, file an application for a permit pursuant to this section authorizing such facility to incinerate hazardous waste identified or listed under this subtitle.

(b) REQUIREMENTS OF PERMIT APPLICATION.—Each application for a permit under this section shall contain such information as may be required under regulations promulgated by the Administrator, including information respecting—

(1) estimates with respect to the composition, quantities, and concentrations of any hazardous waste identified or listed under this subtitle, or combinations of any such hazardous waste and any other solid waste, proposed to be disposed of, treated, transported, or stored, and the time, frequency, or rate of which such waste is proposed to be disposed of, treated, transported, or stored; and

(2) the site at which such hazardous waste or the products of treatment of such hazardous waste will be disposed of, treated, transported to, or stored.

(c) PERMIT ISSUANCE.—(1) Upon a determination by the Administrator (or a State, if applicable), of compliance by a facility for which a permit is applied for under this section with the requirements of this section and section 3004, the Administrator (or the State) shall issue a permit for such facilities. In the event permit applicants propose modification of their facilities, or in the event the Administrator (or the State) determines that modifications are necessary to conform to the requirements under this section and section 3004, the permit shall specify the time allowed to complete the modifications.

(2)(A)(i) Not later than the date four years after the enactment of the Hazardous and Solid Waste Amendments of 1984, in the case of each application under this subsection for a permit for a land disposal facility which was submitted before such date, the Administrator shall issue a final permit pursuant to such application or issue a final denial of such application.

(ii) Not later than the date five years after the enactment of the Hazardous and Solid Waste Amendments of 1984, in the case of each application for a permit under this subsection for an incinerator facility which was submitted before such date, the Administrator shall issue a final permit pursuant to such application or issue a final denial of such application.

(B) Not later than the date eight years after the enactment of the Hazardous and Solid Waste Amendments of 1984, in the case of each application for a permit under this subsection for any facility (other than a facility referred to in subparagraph (A)) which was submitted before such date, the Administrator shall issue a final permit pursuant to such application or issue a final denial of such application.

(C) The time periods specified in this paragraph shall also apply in the case of any State which is administering an authorized hazardous waste program under section 3006. Interim status under subsection (e) shall terminate for each facility referred to in subparagraph (A)(ii) or (B) on the expiration of the five- or eight-year period referred to in subparagraph (A) or (B), whichever is applicable, unless the owner or operator of the facility applies for a final determination regarding the issuance of a permit under this subsection within—

(i) two years after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984 (in the case of a facility referred to in subparagraph (A)(ii)), or

(ii) four years after such date of enactment (in the case of a facility referred to in subparagraph (B)).

(3) Any permit under this section shall be for a fixed term, not to exceed 10 years in the case of any land disposal facility, storage facility, or incinerator or other treatment facility. Each permit for a land disposal facility shall be reviewed five years after date of issuance or reissuance and shall be modified as necessary to assure that the facility continues to comply with the currently applicable requirements of this section and section 3004. Nothing in this subsection shall preclude the Administrator from reviewing and modifying a permit at any time during its term. Review of any application for a permit renewal shall consider improvements in the state of control and measurement technology as well as changes in applicable regulations. Each permit issued under this section shall contain such terms and conditions as the Administrator (or the State) determines necessary to protect human health and the environment.

(d) PERMIT REVOCATION.—Upon a determination by the Administrator (or by a State, in the case of a State having an authorized hazardous waste program under section 3006) of noncompliance by a facility having a permit under this title with the requirements of this section or section 3004, the Administrator (or State, in the case of a State having an authorized hazardous waste program under section 3006) shall revoke such permit.

(e) INTERIM STATUS.—(1) Any person who—

[(1) owns or operates a facility required to have a permit under this section which facility is in existence on November 19, 1980.]

(A) owns or operates a facility required to have a permit under this section which facility—

(i) was in existence on November 19, 1980, or

(ii) is in existence on the effective date of statutory or regulatory changes under this Act that render the facility subject to the requirement to have a permit under this section.

[(2)] (B) has complied with the requirements of section 3010(a), and

[(3)] (C) has made an application for a permit under this section shall be treated as having been issued such permit until such time as final administrative disposition of such application is made, unless the Administrator or other plaintiff proves that final administrative disposition of such application has not been made because of the failure of the applicant to furnish information reasonably required or requested in order to process the application.

This paragraph shall not apply to any facility which has been previously denied a permit under this section or if authority to operate the facility under this section has been previously terminated.

(2) In the case of each land disposal facility which has been granted interim status under this subsection before the date of enactment of the Hazardous and Solid Waste Amendments of 1984, interim status shall terminate on the date twelve months after the

date of the enactment of such Amendments unless the owner or operator of such facility—

(A) applies for a final determination regarding the issuance of a permit under subsection (c) for such facility before the date twelve months after the date of the enactment of such Amendments; and

(B) certifies that such facility is in compliance with all applicable groundwater monitoring and financial responsibility requirements.

(3) In the case of each land disposal facility which is in existence on the effective date of statutory or regulatory changes under this Act that render the facility subject to the requirement to have a permit under this section and which is granted interim status under this subsection, interim status shall terminate on the date twelve months after the date on which the facility first becomes subject to such permit requirement unless the owner or operator of such facility—

(A) applies for a final determination regarding the issuance of a permit under subsection (c) for such facility before the date twelve months after the date on which the facility first becomes subject to such permit requirement; and

(B) certifies that such facility is in compliance with all applicable groundwater monitoring and financial responsibility requirements.

(f) **COAL MINING WASTES AND RECLAMATION PERMITS.**—Notwithstanding subsection (a) through (e) of this section, any surface coal mining and reclamation permit covering any coal mining wastes or overburden which has been issued or approved under the Surface Mining Control and Reclamation Act of 1977 shall be deemed to be a permit issued pursuant to this section with respect to the treatment, storage, or disposal of such wastes or overburden. Regulations promulgated by the Administrator under this subtitle shall not be applicable to treatment, storage, or disposal of coal mining wastes or overburden which are covered by such a permit.

(g) **RESEARCH, DEVELOPMENT, AND DEMONSTRATION PERMITS.**—(1) The Administrator may issue a research, development, and demonstration permit for any hazardous waste treatment facility which proposes to utilize an innovative and experimental hazardous waste treatment technology or process for which permit standards for such experimental activity have not been promulgated under this subtitle. Any such permit shall include such terms and conditions as will assure protection of human health and the environment. Such permits—

(A) shall provide for the construction of such facilities, as necessary, and for operation of the facility for not longer than one year (unless renewed as provided in paragraph (4)), and

(B) shall provide for the receipt and treatment by the facility of only those types and quantities of hazardous waste which the Administrator deems necessary for purposes of determining the efficacy and performance capabilities of the technology or process and the effects of such technology or process on human health and the environment, and

(C) shall include such requirements as the Administrator deems necessary to protect human health and the environment

(including, but not limited to, requirements regarding monitoring, operation, insurance or bonding, financial responsibility, closure, and remedial action), and such requirements as the Administrator deems necessary regarding testing and providing of information to the Administrator with respect to the operation of the facility.

The Administrator may apply the criteria set forth in this paragraph in establishing the conditions of each permit without separate establishment of regulations implementing such criteria.

(2) For the purpose of expediting review and issuance of permits under this subsection, the Administrator may, consistent with the protection of human health and the environment, modify or waive permit application and permit issuance requirements established in the administrator's general permit regulations except that there may be no modification or waiver of regulations regarding financial responsibility (including insurance) or of procedures established under section 7004(b)(2) regarding public participation.

(3) The Administrator may order an immediate termination of all operations at the facility at any time he determines that termination is necessary to protect human health and the environment.

(4) Any permit issued under this subsection may be renewed not more than three times. Each such renewal shall be for a period of not more than 1 year.

(h) **WASTE MINIMIZATION.**—Effective September 1, 1985, it shall be a condition of any permit issued under this section for the treatment, storage, or disposal of hazardous waste on the premises where such waste was generated that the permittee certify, no less often than annually, that—

(1) the generator of the hazardous waste has a program in place to reduce the volume or quantity and toxicity of such waste to the degree determined by the generator to be economically practicable; and

(2) the proposed method of treatment, storage, or disposal is that practicable method currently available to the generator which minimizes the present and future threat to human health and the environment.

(i) **INTERIM STATUS FACILITIES RECEIVING WASTES AFTER JULY 26, 1982.**—The standards concerning ground water monitoring, unsaturated zone monitoring, and corrective action, which are applicable under section 3004 to new landfills, surface impoundments, land treatment units, and waste-pile units required to be permitted under subsection (c) shall also apply to any landfill, surface impoundment, land treatment unit, or waste-pile unit qualifying for the authorization to operate under subsection (e) which receives hazardous waste after July 26, 1982.

(j) **INTERIM STATUS SURFACE IMPOUNDMENTS.**—(1) Except as provided in paragraph (2), (3), or (4), each surface impoundment in existence on the date of enactment of the Hazardous and Solid Waste Amendments of 1984 and qualifying for the authorization to operate under subsection (e) of this section shall not receive, store, or treat hazardous waste after the date four years after such date of enactment unless such surface impoundment is in compliance with the requirements of section 3004(o)(1)(A) which would apply to such impoundment if it were new.

(2) Paragraph (1) of this subsection shall not apply to any surface impoundment which (A) has at least one liner, for which there is no evidence that such liner is leaking; (B) is located more than one-quarter mile from an underground source of drinking water; and (C) is in compliance with generally applicable ground water monitoring requirements for facilities with permits under subsection (c) of this section.

(3) Paragraph (1) of this subsection shall not apply to any surface impoundment which (A) contains treated waste water during the secondary or subsequent phases of an aggressive biological treatment facility subject to a permit issued under section 404 of the Clean Water Act (or which holds such treated waste water after treatment and prior to discharge); (B) is in compliance with generally applicable ground water monitoring requirements for facilities with permits under subsection (c) of this section; and (C)(i) is part a of facility in compliance with section 301(b)(2) of the Clean Water Act, or (ii) in the case of a facility for which no effluent guidelines required under section 304(b)(2) of the Clean Water Act are in effect and no permit under section 402(a)(1) of such Act implementing section 301(b)(2) of such Act has been issued, is part of a facility in compliance with a permit under section 403 of such Act, which is achieving significant degradation of toxic pollutants and hazardous constituents contained in the untreated waste stream and which has identified those toxic pollutants and hazardous constituents in the untreated waste stream to the appropriate permitting authority.

(4) The Administrator (or the State, in the case of a State with an authorized program), after notice and opportunity for comment, may modify the requirements of paragraph (1) for any surface impoundment if the owner or operator demonstrates that such surface impoundment is located, designed and operated so as to assure that there will be no migration of any hazardous constituent into ground water or surface water at any future time. The Administrator or the State shall take into account locational criteria established under section 3004(o)(7).

(5) The owner of operator of any surface impoundment potentially subject to paragraph (1) who has reason to believe that on the basis of paragraph (2), (3), or (4) such surface impoundment is not required to comply with the requirements of paragraph (1), shall apply to the Administrator (or the State, in the case of a State with an authorized program) not later than twenty-four months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 for a determination of the applicability of paragraph (1) (in the case of paragraph (2) or (3)) or for a modification of the requirements of paragraph (1) (in the case of paragraph (4)), with respect to such surface impoundment. Such owner of operator shall provide, with such application, evidence pertinent to such decision, including:

(A) an application for a final determination regarding the issuance of a permit under subsection (c) of this section for such facility, if not previously submitted;

(B) evidence as to compliance with all applicable ground water monitoring requirements and the information and analysis from such monitoring;

(C) all reasonably ascertainable evidence as to whether such surface impoundment is leaking; and

(D) in the case of applications under paragraph (2) or (3), a certification by a registered professional engineer with academic training and experience in ground water hydrology that—

(i) under paragraph (2), the liner of such surface impoundment is designed, constructed, and operated in accordance with applicable requirements, such surface impoundment is more than one-quarter mile from an underground source of drinking water and there is no evidence such liner is leaking; or

(ii) under paragraph (3), based on analysis of those toxic pollutants and hazardous constituents that are likely to be present in the untreated waste stream, such impoundment satisfies the conditions of paragraph (3).

In the case of any surface impoundment for which the owner or operator fails to apply under this paragraph within the time provided by this paragraph or paragraph (6), such surface impoundment shall comply with paragraph (1) notwithstanding paragraph (2), (3), or (4). Within twelve months after receipt of such application and evidence and not later than thirty-six months after such date of enactment, and after notice and opportunity to comment, the Administrator (or, if appropriate, the State) shall advise such owner or operator on the applicability of paragraph (1) to such surface impoundment or as to whether and how the requirements of paragraph (1) shall be modified and applied to such surface impoundment.

(6)(A) In any case in which a surface impoundment becomes subject to paragraph (1) after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 due to the promulgation of additional listings or characteristics for the identification of hazardous waste under section 3001, the period for compliance in paragraph (1) shall be four years after the date of such promulgation, the period for demonstrations under paragraph (4) and for submission of evidence under paragraph (5) shall be not later than twenty-four months after the date of such promulgation, and the period for the Administrator (or if appropriate, the State) to advise such owners or operators under paragraph (5) shall be not later than thirty-six months after the date of promulgation.

(B) In any case in which a surface impoundment is initially determined to be excluded from the requirements of paragraph (1) but due to a change in condition (including the existence of a leak) no longer satisfies the provisions of paragraph (2), (3), or (4) and therefore becomes subject to paragraph (1), the period for compliance in paragraph (1) shall be two years after the date of discovery of such change of condition, or in the case of a surface impoundment excluded under paragraph (3) three years after such date of discovery.

(7)(A) The Administrator shall study and report to the Congress on the number, range of size, construction, likelihood of hazardous constituents migrating into ground water, and potential threat to human health and the environment of existing surface impoundments excluded by paragraph (3) from the requirements of paragraph (1). Such report shall address the need, feasibility, and estimated costs of subjecting such existing surface impoundments to the requirements of paragraph (1).

(B) In the case of any existing surface impoundment or class of surface impoundments from which the Administrator (or the State, in the case of a State with an authorized program) determines hazardous constituents are likely to migrate into ground water, the Administrator (or if appropriate, the State) is authorized to impose such requirements as may be necessary to protect human health and the environment, including the requirements of section 3004(o) which would apply to such impoundments if they were new.

(C) In the case of any surface impoundment excluded by paragraph (3) from the requirement of paragraph (1) which is subsequently determined to be leaking, the Administrator (or, if appropriate, the State) shall require compliance with paragraph (1), unless the Administrator (or, if appropriate, the State) determines that such compliance is not necessary to protect human health and the environment.

(8) In the case of any surface impoundment in which the liners and leak detection system have been installed pursuant to the requirements of paragraph (1) and in good faith compliance with section 3004(o) and the Administrator's regulations and guidance documents governing liners and leak detection systems, no liner or leak detection system which is different from that which was so installed pursuant to paragraph (1) shall be required for such unit by the Administrator when issuing the first permit under this section to such facility. Nothing in this paragraph shall preclude the Administrator from requiring installation of a new liner when the Administrator has reason to believe that any liner installed pursuant to the requirements of this subsection is leaking.

(9) In the case of any surface impoundment which has been excluded by paragraph (2) on the basis of a liner meeting the definition under paragraph (12)(A)(ii), at the closure of such impoundment the Administrator shall require the owner or operator of such impoundment to remove or decontaminate all waste residues, all contaminated liner material, and contaminated soil to the extent practicable. If all contaminated soil is not removed or decontaminated, the owner or operator of such impoundment shall be required to comply with appropriate post-closure requirements, including but not limited to ground water monitoring and corrective action.

(10) Any incremental cost attributable to the requirements of this subsection or section 3004(o) shall not be considered by the Administrator (of the State, in the case of a State with an authorized program under section 402 of the Clean Water Act)—

(A) in establishing effluent limitations and standards under section 301, 304, 306, 307, or 402 of the Clean Water Act based on effluent limitations guidelines and standards promulgated any time before twelve months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984; or

(B) in establishing any other effluent limitations to carry out the provisions of section 301, 307, or 402 of the Clean Water Act on or before October 1, 1986.

(11)(A) If the Administrator allows a hazardous waste which is prohibited from one or more methods of land disposal under subsection (d), (e), or (g) of section 3004 (or under regulations promulgated by the Administrator under such subsections) to be placed in a surface impoundment (which is operating pursuant to interim status)

for storage or treatment, such impoundment shall meet the requirements that are applicable to new surface impoundments under section 2004(o)(1), unless such impoundment meets the requirements of paragraph (2) or (4).

(B) In the case of any hazardous waste which is prohibited from one or more methods of land disposal under subsection (d), (e), or (g) of section 3004 (or under regulations promulgated by the Administrator under such subsection) the placement or maintenance of such hazardous waste in a surface impoundment for treatment is prohibited as of the effective date of such prohibition unless the treatment residues which are hazardous are, at a minimum, removed for subsequent management within one year of the entry of the waste into the surface impoundment.

(12)(A) For the purposes of paragraph (2)(A) of this subsection, the term "liner" means—

(i) a liner designed, constructed, installed, and operated to prevent hazardous waste from passing into the liner at any time during the active life of the facility; or

(ii) a liner designed, constructed, installed, and operated to prevent hazardous waste from migrating beyond the liner to adjacent subsurface soil, ground water, or surface water at any time during the active life of the facility.

(B) For the purposes of this subsection, the term "aggressive biological treatment facility" means a system of surface impoundments in which the initial impoundment of the secondary treatment segment of the facility utilizes intense mechanical aeration to enhance biological activity to degrade waste water pollutants and

(i) the hydraulic retention time in such initial impoundment is no longer than 5 days under normal operating conditions, on an annual average basis;

(ii) the hydraulic retention time in such initial impoundment is no longer than thirty days under normal operating conditions, on an annual average basis: Provided, That the sludge in such impoundment does not constitute a hazardous waste as identified by the extraction procedure toxicity characteristic in effect on the date of enactment of the Hazardous and Solid Waste Amendments of 1984; or

(iii) such system utilizes activated sludge treatment in the first portion of secondary treatment.

(C) For the purposes of this subsection, the term "underground source or drinking water" has the same meaning as provided in regulations under the Safe Drinking Water Act (title XIV of the Public Health Service Act).

(13) The Administrator may modify the requirements of paragraph (1) in the case of a surface impoundment for which the owner or operator, prior to October 1, 1984, has entered into, and is in compliance with, a consent order, decree, or agreement with the Administrator or a State with an authorized program mandating corrective action with respect to such surface impoundment that provides a degree of protection of human health and the environment which is at a minimum equivalent to that provided by paragraph (1).

AUTHORIZED STATE HAZARDOUS WASTE PROGRAMS

SEC. 3006. (a) FEDERAL GUIDELINES.—Not later than eighteen months after the date of enactment of this Act, the Administrator, after consultation with State authorities, shall promulgate guidelines to assist States in the development of State hazardous waste programs.

(b) AUTHORIZATION OF STATE PROGRAMS.—Any State which seeks to administer and enforce a hazardous waste program pursuant to this subtitle may develop and, after notice and opportunity for public hearing, submit to the Administrator on application, in such form as he shall require, for authorization of such program. Within ninety days following submission of an application under this subsection, the Administrator shall issue a notice as to whether or not he expects such program to be authorized, and within ninety days following such notice (and after opportunity for public hearing) he shall publish his findings as to whether or not the conditions listed in items (1), (2), and (3) below have been met. Such State is authorized to carry out such program in lieu of the Federal program under this subtitle in such State and to issue and enforce permits for the storage, treatment, or disposal of hazardous waste *(and to enforce permits deemed to have been issued under section 3012(d)(1))* unless, within ninety days following submission of the application the Administrator notifies such State that such program may not be authorized and, within ninety days following such notice and after opportunity for public hearing, he finds that (1) such State program is not equivalent to the Federal program under this subtitle, (2) such program is not consistent with the Federal or State programs applicable in other States, or (3) such program does not provide adequate enforcement of compliance with the requirements of this subtitle. *In authorizing a State program, the Administrator may base his findings on the Federal program in effect one year prior to submission of a State's application or in effect on January 26, 1983, whichever is later.*

(c) INTERIM AUTHORIZATION.—(1) Any State which has in existence a hazardous waste program pursuant to State law before the date ninety days after the date of promulgation of regulations under sections 3002, 3003, 3004, and 3005, may submit to the Administrator evidence of such existing program and may request a temporary authorization to carry out such program under this subtitle. The Administrator shall, if the evidence submitted shows the existing State program to be substantially equivalent to the Federal program under this subtitle, grant an interim authorization to the State to carry out such program in lieu of the Federal program pursuant to this subtitle for a [twenty-four month period beginning on the date six months after the date of promulgation of regulations under sections 3002 through 3005.] *period ending no later than January 31, 1986.*

(2) *The Administrator shall, by rule, establish a date for the expiration of interim authorization under this subsection.*

(3) *Pending interim or final authorization of a State program for any State which reflects the amendments made by the Hazardous and Solid Waste Amendments of 1984, the State may enter into an agreement with the Administrator under which the State may assist*

in the administration of the requirements and prohibitions which take effect pursuant to such Amendments.

(4) In the case of a State permit program for any State which is authorized under subsection (b) or under this subsection, until such program is amended to reflect the amendments made by the Hazardous and Solid Waste Amendments of 1984 and such program amendments receive interim or final authorization, the Administrator shall have the authority in such State to issue or deny permits or those portions of permits affected by the requirements and prohibitions established by the Hazardous and Solid Waste Amendments of 1984. The Administrator shall coordinate with States the procedures for issuing such permits.

(d) EFFECT OF STATE PERMIT.—Any action taken by a State under a hazardous waste program authorized under this section shall have the same force and effect as action taken by the Administrator under this subtitle.

(e) WITHDRAWAL OF AUTHORIZATION.—Wherever the Administrator determines after public hearing that a State is not administering and enforcing a program authorized under this section in accordance with requirements of this section, he shall so notify the State, and if appropriate corrective action is not taken within a reasonable time, not to exceed ninety days, the Administrator shall withdraw authorization of such program and establish a Federal program pursuant to this subtitle. The Administrator shall not withdraw authorization of any such program unless he shall first have notified the State, and made public, in writing, the reasons for such withdrawal.

(f) AVAILABILITY OF INFORMATION.—No State program may be authorized by the Administrator under this section unless—

(1) such program provides for the public availability of information obtained by the State regarding facilities and sites for the treatment, storage, and disposal of hazardous waste; and

(2) such information is available to the public in substantially the same manner and to the same degree, as would be the case if the Administrator was carrying out the provisions of this subtitle in such State.

(g) AMENDMENTS MADE BY 1984 ACT.—(1) Any requirement or prohibition which is applicable to the generation, transportation, treatment, storage, or disposal of hazardous waste and which is imposed under this subtitle pursuant to the amendments made by the Hazardous and Solid Waste Amendments of 1984 shall take effect in each State having an interim or finally authorized State program on the same date as such requirement takes effect in other States. The Administrator shall carry out such requirement directly in each such State unless the State program is finally authorized (or is granted interim authorization as provided in paragraph (2)) with respect to such requirements.

(2) Any State which, before the date of the enactment of the Hazardous and Solid Waste Amendments of 1984 has an existing hazardous waste program which has been granted interim or final authorization under this section may submit to the Administrator evidence that such existing program contains (or has been amended to include) any requirement which is substantially equivalent to a requirement referred to in paragraph (1) and may request interim au-

thorization to carry out that requirement under this subtitle. The Administrator shall, if the evidence submitted shows the State requirement to be substantially equivalent to the requirement referred to in paragraph (1), grant an interim authorization to the State to carry out such requirement in lieu of direct administration in the State by the Administrator of such requirement.

⁴ (h) *STATE PROGRAMS FOR USED OIL.*—In the case of used oil which is not listed or identified under this subtitle as a hazardous waste but which is regulated under section 3014, the provisions of this section regarding State programs shall apply in the same manner and to the same extent as such provisions apply to hazardous waste identified or listed under this subtitle.

INSPECTIONS

SEC. 3007. (a) *ACCESS ENTRY.*—For purposes of developing or assisting in the development of any regulation or enforcing the provisions of this title any person who generates, stores, treats, transports, disposes of or has handled hazardous wastes shall, upon request of any officer, employee, or representative of the Environmental Protection Agency, duly designated by the Administrator, or upon request of any duly designated officer, employee, or representative of a State having an authorized hazardous waste program, furnish information relating to such wastes and and permit such person at all reasonable times to have access to, and to copy all records relating to such wastes. For the purposes of developing or assisting in the development of any regulation or enforcing the provisions of this title, such officers, employees, or representatives are authorized—

(1) enter at reasonable times any establishment or other place where hazardous wastes are, or have been, generated, stored, treated, or disposed of, or transported from;

(2) to inspect and obtain samples from any person of any such wastes and samples of any containers or labeling for such wastes.

Each such inspection shall be commenced and completed with reasonable promptness. If the officer, employee, or representative obtains any samples, prior to leaving the premises, he shall give to the owner, operator, or agent in charge a receipt describing the sample obtained and if requested a portion of each such sample equal in volume or weight to the portion retained. If any analysis is made of such samples, a copy of the results of such analysis shall be furnished promptly to the owner, operator, or agent in charge.

(b) *AVAILABILITY TO PUBLIC.*—(1) Any records, reports, or information (including records, reports, or information obtained by representatives of the Environmental Protection Agency) obtained from any person under this section [(including records, reports, or information obtained by representatives of the Environmental Protection Agency)] shall be available to the public, except that upon a showing satisfactory to the Administrator (or the State, as the case may be) by any person that records, reports, or information, or particular part thereof, to which the Administrator (or the State, as

⁴ P.L. 99-499, Superfund.

the case may be) or any officer, employee, or representative thereof has access under this section if made public, would divulge information entitled to protection under section 1905 of title 18 of the United States Code, such information or particular portion thereof shall be considered confidential in accordance with the purposes of that section, except that such record, report, document, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this Act, or when relevant in any proceeding under this Act.

(2) Any person not subject to the provisions of section 1905 of title 18 of the United States Code who knowingly and willfully divulges or discloses any information entitled to protection under this subsection shall, upon conviction, be subject to a fine of not more than \$5,000 or to imprisonment not to exceed one year, or both.

(3) In submitting data under this Act, a person required to provide such data may—

(A) designate the data which such person believes is entitled to protection under this subsection, and

(B) submit such designated data separately from other data submitted under this Act.

A designation under this paragraph shall be made in writing and in such manner as the Administrator may prescribe.

(4) Notwithstanding any limitation contained in this section or any other provision of law, all information reported to, or otherwise obtained by, the Administrator (or any representative of the Administrator) under this Act shall be made available upon written request of any duly authorized committee of the Congress, to such committee.

(c) *FEDERAL FACILITY INSPECTIONS.*—Beginning twelve months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall, or in the case of a State with an authorized hazardous waste program the State may, undertake on an annual basis a thorough inspection of each facility for the treatment, storage, or disposal of hazardous waste which is owned or operated by a Federal agency to enforce its compliance with this subtitle and the regulations promulgated thereunder. The records of such inspections shall be available to the public as provided in subsection (b).

(d) *STATE-OPERATED FACILITIES.*—The Administrator shall annually undertake a thorough inspection of every facility for the treatment, storage, or disposal of hazardous waste which is operated by a State or local government for which a permit is required under section 3005 of this title. The records of such inspection shall be available to the public as provided in subsection (b).

(e) *MANDATORY INSPECTIONS.*—(1) The Administrator (or the State in the case of a State having an authorized hazardous waste program under this subtitle) shall commence a program to thoroughly inspect every facility for the treatment, storage, or disposal of hazardous waste for which a permit is required under section 3005 no less often than every two years as to its compliance with this subtitle (and the regulations promulgated under this subtitle). Such inspections shall commence not later than twelve months after the date of enactment of the Hazardous and Solid Waste Amendments

of 1984. The Administrator shall, after notice and opportunity for public comment, promulgate regulations governing the minimum frequency and manner of such inspections, including the manner in which records of such inspections shall be maintained and the manner in which reports of such inspections shall be filed. The Administrator may distinguish between classes and categories of facilities commensurate with the risks posed by each class or category.

(2) Not later than six months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall submit to the Congress a report on the potential for inspections of hazardous waste treatment, storage, or disposal facilities by nongovernmental inspectors as a supplement to inspections conducted by officers, employees, or representatives of the Environmental Protection Agency or States having authorized hazardous waste programs or operating under a cooperative agreement with the Administrator. Such report shall be prepared in cooperation with the States, insurance companies offering environmental impairment insurance, independent companies providing inspection services, and other such groups as appropriate. Such report shall contain recommendations on provisions and requirements for a program of private inspections to supplement governmental inspections.

FEDERAL ENFORCEMENT

SEC. 3008. (a) COMPLIANCE ORDERS.—**[(1) Except as provided in paragraph (2), whenever on the basis of any information the Administrator determines that any person is in violation of any requirement of this subtitle, the Administrator may issue an order requiring compliance immediately or within a specified time period or the Administrator may commence a civil action in the United States district court in the district in which the violation occurred for appropriate relief, including a temporary or permanent injunction.] (1) Except as provided in paragraph (2), whenever on the basis of any information the Administrator determines that any person has violated or is in violation of any requirement of the subtitle, the Administrator may issue an order assessing a civil penalty for any past or current violation, requiring compliance immediately or within a specified time period, or both, or the Administrator may commence a civil action in the United States district court in the district in which the violation occurred for appropriate relief, including a temporary or permanent injunction.**

(2) In the case of a violation of any requirement of this subtitle where such violation occurs in a State which is authorized to carry out a hazardous waste program under section 3006, the Administrator shall give notice to the State in which such violation has occurred thirty days prior to issuing an order or commencing a civil action under this section.

[(3) If such violator fails to take corrective action within the time specified in the order, he shall be liable for a civil penalty of not more than \$25,000 for each day of continued noncompliance and the Administrator may suspend or revoke any permit issued to the violator (whether issued by the Administrator or the State).]

(3) Any order issued pursuant to this subsection may include a suspension or revocation of any permit issued by the Administrator

or a State under this subtitle and shall state with reasonable specificity the nature of the violation. Any penalty assessed in the order shall not exceed \$25,000 per day of noncompliance for each violation of a requirement of this subtitle. In assessing such a penalty, the Administrator shall take into account the seriousness of the violation and any good faith efforts to comply with applicable requirements.

(b) **PUBLIC HEARING.**—Any order issued under this section shall become final unless, no later than thirty days after the order or persons named therein request a public hearing. Upon such request the Administrator shall promptly conduct a public hearing. In connection with any proceeding under this section the Administrator may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and may promulgate rules for discovery procedures.

[(c) **REQUIREMENTS OF COMPLIANCE ORDERS.**—Any order issued under this section may include a suspension or revocation of a permit issued under this subtitle, and shall state with reasonable specificity the nature of the violation and specify a time for compliance and assess a penalty, if any, which the Administrator determines is reasonable taking into account the seriousness of the violation and any good faith efforts to comply with the applicable requirements.]

(c) **VIOLATION OF COMPLIANCE ORDERS.**—If a violator fails to take corrective action within the time specified in a compliance order, the Administrator may assess a civil penalty of not more than \$25,000 for each day of continued noncompliance with the order and the Administrator may suspend or revoke any permit issued to the violator (whether issued by the Administrator or the State).

(d) **CRIMINAL PENALTIES.**—Any person who—

(1) knowingly transports or causes to be transported any hazardous waste identified or listed under this subtitle to a facility which does not have a permit under [section 3005 (or 3006 in the case of a State program),] *this subtitle* or pursuant to title I of the Marine Protection, Research, and Sanctuaries Act (86 Stat. 1052),

(2) knowingly treats, stores, or disposes of any hazardous waste identified or listed under this subtitle [either]—

(A) without [having obtained] a permit under [section 3005 (or 3006 in the case of a State program)] *this subtitle* or pursuant to title I of the Marine Protection, Research, and Sanctuaries Act (86 Stat. 1052); or

[(B) in knowing violation of any material condition or requirement of such permit;]

(B) in knowing violation of any material condition or requirement of such permit; or

(C) in knowing violation of any material condition or requirement of any applicable interim status regulations or standards;

[(3) knowingly makes any false material statement or representation in any application, label, manifest, record, report, permit or other document filed, maintained, or used for purposes of compliance with this subtitle; or

[(4) knowingly generates, stores, treats, transports, disposes of, or otherwise handles any hazardous waste (whether such activity took place before or takes place after the date of the enactment of this paragraph) and who knowingly destroys, alters, or conceals any record required to be maintained under regulations promulgated by the Administrator under this subtitle,

shall, upon conviction, be subject to a fine of not more than \$25,000 (\$50,000 in the case of a violation of paragraph (1) or (2)) for each day of violation, or to imprisonment not to exceed one year (two years in the case of a violation of paragraph (1) or (2)), or both. If the conviction is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two years, or by both.]

(3) knowingly omits material information or makes any false material statement or representation in any application, label, manifest, record, report, permit, or other document filed, maintained, or used for purposes of compliance with regulations promulgated by the Administrator (or by a State in the case of an authorized State program) under this subtitle;

(4) knowingly generates, stores, treats, transports, disposes of, exports or otherwise handles any hazardous waste [or any used oil not identified or listed as a hazardous waste under this subtitle]⁵ (whether such activity took place before or takes place after the date of the enactment of this paragraph) and who knowingly destroys, alters, conceals, or fails to file any record, application, manifest, report, or other document required to be maintained or filed for purposes of compliance with regulations promulgated by the Administrator (or by a State in the case of an authorized State program) under this subtitle;

(5) knowingly transports without a manifest, or causes to be transported without a manifest, any hazardous waste [or any used oil not identified or listed as a hazardous waste under this subtitle]⁵ required by regulations promulgated under this subtitle (or by a State in the case of a State program authorized under this subtitle) to be accompanied by a manifest;

shall, upon conviction, be subject to a fine of not more than \$50,000 for each day of violation, or imprisonment not to exceed two years (five years in the case of a violation of paragraph (1) or (2)), or both. If the conviction is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment under the respective paragraph shall be doubled with respect to both fine and imprisonment; or

(6) knowingly exports a hazardous waste identified or listed under this subtitle (A) without the consent of the receiving country or, (B) where there exists an international agreement between the United States and the government of the receiving country establishing notice, export, and enforcement procedures for the transportation, treatment, storage, and disposal of haz-

⁵ Language enclosed in light-face brackets indicates amendment made by P.L. 99-499, Superfund.

ardous wastes, in a manner which is not in conformance with such agreement [.] ; or ⁶

⁶ (7) knowingly stores, treats, transports, or causes to be transported, disposes of, or otherwise handles any used oil not identified or listed as hazardous waste under subtitle C of the Solid Waste Disposal Act—

(A) in knowing violation of any material condition or requirement of a permit under this subtitle C; or

(B) in knowing violation of any material condition or requirement of any applicable regulations or standards under this Act;

[(e) KNOWING ENDANGERMENT.—Any person who knowingly transports, treats, stores or disposes of any hazardous waste identified or listed under this subtitle—

[(1)(A) in violation of paragraph (1) or (2) of subsection (d) of this section, or

[(B) having applied for a permit under section 3005 or 3006, and knowingly either—

[(i) has failed to include in his application material information required under regulations promulgated by the Administrator, or

[(ii) fails to comply with the applicable interim status regulations and standards promulgated pursuant to this subtitle,

who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, and

[(2)(A) if his conduct in the circumstances manifests an unjustified and inexcusable disregard for human life, or

[(B) if his conduct in the circumstances manifests an extreme indifference for human life,

shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment for not more than 2 years, or both, except that any person who violates subsection (e)(2)(B) shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment for not more than 5 years, or both. A defendant that is an organization shall, upon conviction of violating this subsection, be subject to a fine of not more than \$1,000,000.]

(e) KNOWING ENDANGERMENT.—Any person who knowingly transports, treats, stores, disposes of, or exports any hazardous waste identified or listed under this subtitle [or used oil not identified or listed as a hazardous waste under this subtitle]⁷ in violation of paragraph (1), (2), (3), (4), (5), [or]⁷ (6), [or (7)]⁷ of subsection (d) of this section who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment for not more than fifteen years, or both. A defendant that is an organization shall, upon conviction of violating this subsection, be subject to a fine of not more than \$1,000,000.

(f) SPECIAL RULES.—For the purposes of subsection (e)—

(1) A person's state of mind is knowing with respect to—

⁶ P.L. 99-499, Superfund.

⁷ Language enclosed in light-face brackets indicates amendment made by P.L. 99-499, Superfund.

(A) his conduct, if he is aware of the nature of his conduct;

(B) an existing circumstance, if he is aware or believes that the circumstance exists; or

(C) a result of his conduct, if he is aware or believes that his conduct is substantially certain to cause danger of death or serious bodily injury.

(2) In determining whether a defendant who is a natural person knew that his conduct placed another person in imminent danger of death or serious bodily injury—

(A) the person is responsible only for actual awareness or actual belief that he possessed; and

(B) knowledge possessed by a person other than the defendant but not by the defendant himself may not be attributed to the defendant;

Provided, That in proving the defendant's possession of actual knowledge, circumstantial evidence may be used, including evidence that the defendant took affirmative steps to shield himself from relevant information.

(3) It is an affirmative defense to a prosecution that the conduct charged was consented to by the person endangered and that the danger and conduct charged were reasonably foreseeable hazards of—

(A) an occupation, a business, or a profession; or

(B) medical treatment or medical or scientific experimentation conducted by professionally approved methods and such other person had been made aware of the risks involved prior to giving consent.

The defendant may establish an affirmative defense under this subsection by a preponderance of the evidence.

(4) All general defenses, affirmative defenses, and bars to prosecution that may apply with respect to other Federal criminal offenses may apply under subsection (e) and shall be determined by the courts of the United States according to the principles of common law as they may be interpreted in the light of reason and experience. Concepts of justification and excuse applicable under this section may be developed in the light of reason and experience.

(5) The term "organization" means a legal entity, other than a government, established or organized for any purpose, and such term includes a corporation, company, association, firm, partnership, joint stock company, foundation, institution, trust, society, union, or any other association of persons.

(6) The term "serious bodily injury" means—

(A) bodily injury which involve a substantial risk of death;

(B) unconsciousness;

(C) extreme physical pain;

(D) protracted and obvious disfigurement; or

(E) protracted loss or impairment of the function of a bodily member, organ, or mental faculty.

(g) **CIVIL PENALTY.**—Any person who violates any requirement of this subtitle shall be liable to the United States for a civil penalty in an amount not to exceed \$25,000 for each such violation. Each

day of such violation shall, for purposes of this subsection, constitute a separate violation. *Nothing in this title (or in any regulation adopted under this title) shall be construed to prohibit any State from requiring that the State be provided with a copy of each manifest used in connection with hazardous waste which is generated within that State or transported to a treatment, storage, or disposal facility within that State.*

(h) *INTERIM STATUS CORRECTIVE ACTION ORDERS.*—(1) *Whenever on the basis of any information the Administrator determines that there is or has been a release of hazardous waste into the environment from a facility authorized to operate under section 3005(e) of this subtitle, the Administrator may issue an order requiring corrective action or such other response measure as he deems necessary to protect human health or the environment or the Administrator may commence a civil action in the United States district court in the district in which the facility is located for appropriate relief, including a temporary or permanent injunction.*

(2) *Any order issued under this subsection may include a suspension or revocation of authorization to operate under section 3005(e) of this subtitle, shall state with reasonable specificity the nature of the required corrective action or other response measure, and shall specify a time for compliance. If any person named in an order fails to comply with the order, the Administrator may assess, and such person shall be liable to the United States for, a civil penalty in an amount not to exceed \$25,000 for each day of noncompliance with the order.*

RETENTION OF STATE AUTHORITY

SEC. 3009. Upon the effective date of regulations under this subtitle no State or political subdivision may impose any requirements less stringent than those authorized under this subtitle respecting the same matter as governed by such regulations, except that if application of a regulation with respect to any matter under this subtitle is postponed or enjoined by the action of any court, no State or political subdivision shall be prohibited from acting with respect to the same aspect of such matter until such time as such regulation takes effect. Nothing in this title shall be construed to prohibit any State or political subdivision thereof from imposing any requirements, including those for site selection, which are more stringent than those imposed by such regulations.

EFFECTIVE DATE

SEC. 3010. (a) *PRELIMINARY NOTIFICATION.*—Not later than ninety days after promulgation of regulations under section 3001 identifying by its characteristics of listing any substance as hazardous waste subject to this subtitle, any person generating or transporting such substance or owning or operating a facility for treatment, storage, or disposal of such substances shall file with the Administrator (or with States having authorized hazardous waste permit programs under section 3006) a notification stating the location and general description of such activity and the identified or listed hazardous wastes handled by such person. *Not later than fifteen*

months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984—

(1) the owner or operator of any facility which produces a fuel (A) from any hazardous waste identified or listed under section 3001, (B) from such hazardous waste identified or listed under section 3001 and any other material, (C) from used oil, or (D) from used oil and any other material;

(2) the owner or operator of any facility (other than a single- or two-family residence) which burns for purposes of energy recovery any fuel produced as provided in paragraph (1) or any fuel which otherwise contains used oil or any hazardous waste identified or listed under section 3001; and

(3) any person who distributes or markets any fuel which is produced as provided in paragraph (1) or any fuel which otherwise contains used oil or any hazardous waste identified or listed under section 3001

shall file with the Administrator (and with the State in the case of a State with an authorized hazardous waste program) a notification stating the location and general description of the facility, together with a description of the identified or listed hazardous waste involved and, in the case of a facility referred to in paragraph (1) or (2), a description of the production or energy recovery activity carried out at the facility and such other information as the Administrator deems necessary. For purposes of the preceding sentence, the term "hazardous waste listed under section 3001" also includes any commercial chemical product which is listed under section 3001 and which, in lieu of its original intended use, is (i) produced for use as (or as a component of) a fuel, (ii) distributed for use as a fuel, or (iii) burned as a fuel. Notification shall not be required under the second sentence of this subsection in the case of facilities (such as residential boilers) where the Administrator determines that such notification is not necessary in order for the Administrator to obtain sufficient information respecting current practices of facilities using hazardous waste for energy recovery. Nothing in this subsection shall be construed to affect or impair the provisions of section 3001(b)(3). Nothing in this subsection shall affect regulatory determinations under section 3014.

In revising any regulation under section 3001 identifying additional characteristics of hazardous waste or listing any additional substance as hazardous waste subject to this subtitle, the Administrator may require any person referred to in the [preceding sentence] proceeding provisions to file with the Administrator (or with States having authorized hazardous waste permit programs under section 3006) the notification described in the [preceding sentence] proceeding provisions. Not more than one such notification shall be required to be filed with respect to the same substance. No identified or listed hazardous waste subject to this subtitle may be transported, treated, stored, or disposed of unless notification has been given as required under this subsection.

(b) **EFFECTIVE DATE OF REGULATION.**—The regulations under this subtitle respecting requirements applicable to the generation, transportation, treatment, storage, or disposal of hazardous waste (including requirements respecting permits for such treatment, storage, or disposal) shall take effect on the date six months after

the date of promulgation thereof (or six months after the date of revision in the case of any regulation which is revised after the date required for promulgation thereof). *At the time a regulation is promulgated, the Administrator may provide for a shorter period prior to the effective date, or an immediate effective date for:*

- (1) a regulation with which the Administrator finds the regulated community does not need six months to come into compliance;*
- (2) a regulation which responds to an emergency situation; or*
- (3) other good cause found and published with the regulation.*

AUTHORIZATION OF ASSISTANCE TO STATES

SEC. 3011. (a) **AUTHORIZATION.**—There is authorized to be appropriated \$25,000,000 for each of the fiscal years 1978 and 1979, \$20,000,000 for fiscal year 1980, \$35,000,000 for fiscal year 1981, [and \$40,000,000 for fiscal year 1982] *\$40,000,000 for the fiscal year 1982, \$55,000,000 for the fiscal year 1985, \$60,000,000 for the fiscal year 1986, \$60,000,000 for the fiscal year 1987, and \$60,000,000 for the fiscal year 1988* to be used to make grants to the States for purposes of assisting the States in the development and implementation of authorized State hazardous waste programs.

(b) **ALLOCATION.**—Amounts authorized to be appropriated under subsection (a) shall be allocated among the States on the basis of regulations promulgated by the Administrator, after consultation with the States, which take into account, the extent to which hazardous waste is generated, transported, treated, stored, and disposed of within such State, the extent of exposure of human beings and the environment within such State to such State to such waste, and such other factors as the Administrator deems appropriate.

(c) **ACTIVITIES INCLUDED.**—State hazardous waste programs for which grants may be made under subsection (a) may include (but shall not be limited to) planning for hazardous waste treatment, storage and disposal facilities, and the development and execution of programs to protect health and the environment from inactive facilities which may contain hazardous waste.

HAZARDOUS WASTE SITE INVENTORY

SEC. 3012. (a) **STATE INVENTORY PROGRAMS.**—Each State shall, as expeditiously as practicable, undertake a continuing program to compile, publish, and submit to the Administrator an inventory describing the location of each site within such State at which hazardous waste has at any time been stored or disposed of. Such inventory shall contain—

- (1) a description of the location of the sites at which any such storage or disposal has taken place before the date on which permits are required under section 3005 for such storage or disposal;
- (2) such information relating to the amount, nature, and toxicity of the hazardous waste at each such site as may be practicable to obtain and may be necessary to determine the extent of any health hazard which may be associated with such site;

(3) the name and address, or corporate headquarters of, the owner of each such site, determined as of the date of preparation of the inventory;

(4) an identification of the types or techniques of waste treatment or disposal which have been used at each site; and

(5) information concerning the current status of the site, including information respecting whether or not hazardous waste is currently being treated or disposed of at such site (and if not, the date on which such activity ceased) and information respecting the nature of any other activity currently carried out at such site.

For purposes of assisting the States in compiling information under this section, the Administrator shall make available to each State undertaking a program under this section such information as is available to him concerning the items specified in paragraphs (1) through (5) with respect to the sites within such State, including such information as the Administrator is able to obtain from other agencies or departments of the United States and from surveys and studies carried out by any committee or subcommittee of the Congress. Any State may exercise the authority of section 3007 for purposes of this section in the same manner and to the same extent as provided in such section in the case of States having an authorized hazardous waste program, and any State may by order require any person to submit such information as may be necessary to compile the data referred to in paragraphs (1) through (5).

(b) ENVIRONMENTAL PROTECTION AGENCY PROGRAM.—If the Administrator determines that any State program under subsection (a) is not adequately providing information respecting the sites in such State referred to in subsection (a), the Administrator shall notify the State. If within ninety days following such notification, the State program has not been revised or amended in such manner as will adequately provide such information, the Administrator shall carry out the inventory program in such State. In any such case—

(1) the Administrator shall have the authorities provided with respect to State programs under subsection (a);

(2) the funds allocated under subsection (c) for grants to States under this section may be used by the Administrator for carrying out such program in such State; and

(3) no further expenditure may be made for grants to such State under this section until such time as the Administrator determines that such State is carrying out, or will carry out, an inventory program which meets the requirements of this section.

(c) GRANTS.—(1) Upon receipt of an application submitted by any State to carry out a program under this section, the Administrator may make grants to the States for purposes of carrying out such a program. Grants under this section shall be allocated among the several States by the Administrator based upon such regulations as he prescribes to carry out the purposes of this section. The Administrator may make grants to any State which has conducted an inventory program which effectively carried out the purposes of this section before the date of the enactment of the Solid Waste Disposal Act Amendments of 1980 to reimburse such State for all, or any

portion of, the costs incurred by such State in conducting such program.

(2) There are authorized to be appropriated to carry out this section **[\$20,000,000.] \$25,000,000 for each of the fiscal years 1985 through 1988.**

(d) **NO IMPEDIMENT TO IMMEDIATE REMEDIAL ACTION.**—Nothing in this section shall be construed to provide that the Administrator or any State should, pending completion of the inventory required under this section, postpone undertaking any enforcement or remedial action with respect to any site at which hazardous waste has been treated, stored, or disposed of.

MONITORING, ANALYSIS, AND TESTING

SEC. 3013. (a) AUTHORITY OF ADMINISTRATOR.—If the Administrator determines, upon receipt of any information, that--

(1) the presence of any hazardous waste at a facility or site at which hazardous waste is, or has been, stored, treated, or disposed of, or

(2) the release of any waste from such facility or site may present a substantial hazard to human health or the environment,

he may issue an order requiring the owner or operator of such facility or site to conduct such monitoring, testing, analysis, and reporting with respect to such facility or site as the Administrator deems reasonable to ascertain the nature and extent of such hazard.

(b) **PREVIOUS OWNERS AND OPERATORS.**—In the case of any facility or site not in operation at the time a determination is made under subsection (a) with respect to the facility or site, if the Administrator finds that the owner of such facility or site could not reasonably be expected to have actual knowledge of the presence of hazardous waste at such facility or site and of its potential for release, he may issue an order requiring the most recent previous owner or operator of such facility or site who could reasonably be expected to have such actual knowledge to carry out the actions referred to in subsection (a).

(c) **PROPOSAL.**—An order under subsection (a) or (b) shall require the person to whom such order is issued to submit to the Administrator within 30 days from the issuance of such order a proposal for carrying out the required monitoring, testing, analysis, and reporting. The Administrator may, after providing such person with an opportunity to confer with the Administrator respecting such proposal, require such person to carry out such monitoring, testing, analysis, and reporting in accordance with such proposal, and such modifications in such proposal as the Administrator deems reasonable to ascertain the nature and extent of the hazard.

(d) **MONITORING, ETC., CARRIED OUT BY ADMINISTRATOR.**—(1) If the Administrator determines that no owner or operator referred to in subsection (a) or (b) is able to conduct monitoring, testing, analysis, or reporting satisfactory to the Administrator, if the Administrator deems any such action carried out by an owner or operator to be unsatisfactory, or if the Administrator cannot initially determine that there is an owner or operator referred to in subsection (a) or

(b) who is able to conduct such monitoring, testing, analysis, or reporting, he may—

(A) conduct monitoring, testing, or analysis (or any combination thereof) which he deems reasonable to ascertain the nature and extent of the hazard associated with the site concerned, or

(B) authorize a State or local authority or other person to carry out any such action,

and require, by order, the owner or operator referred to in subsection (a) or (b) to reimburse the Administrator or other authority or person for the costs of such activity.

(2) No order may be issued under this subsection requiring reimbursement of the costs of any action carried out by the Administrator which confirms the results of an order issued under subsection (a) or (b).

(3) For purposes of carrying out this subsection, the Administrator or any authority or other person authorized under paragraph (1), may exercise the authorities set forth in section 3007.

(e) ENFORCEMENT.—The Administrator may commence a civil action against any person who fails or refuses to comply with any order issued under this section. Such action shall be brought in the United States district court in which the defendant is located, resides, or is doing business. Such court shall have jurisdiction to require compliance with such order and to assess a civil penalty of not to exceed \$5,000 for each day during which such failure or refusal occurs.

RESTRICTIONS ON RECYCLED OIL

[SEC. 3012.] SEC. 3014. (a) IN GENERAL.—Not later than one year after the date of the enactment of this section, the Administrator shall promulgate regulations establishing such performance standards and other requirements as may be necessary to protect the public health and the environment from hazards associated with recycled oil. In development such regulations, the Administrator shall conduct an analysis of the economic impact of the regulations on the oil recycling industry. The Administrator shall ensure that the such regulations do not discourage the recovery or recycling of used oil [], consistent with the protection of human health and the environment.

(b) IDENTIFICATION OR LISTING OF USED OIL AS HAZARDOUS WASTE.—Not later than twelve months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 the Administrator shall propose whether to list or identify used automobile and truck crankcase oil as hazardous waste under section 3001. Not later than twenty-four months after such date of enactment, the Administrator shall make a final determination whether to list or identify used automobile and truck crankcase oil and other used oil as hazardous wastes under section 3001.

(c) USED OIL WHICH IS RECYCLED.—With respect to generators and transporters of used oil identified or listed as a hazardous waste under section 3001, the standards promulgated under section 3001(d), 3002, and 3003 of this subtitle shall not apply to such used oil if such used oil is recycled.

(2)(A) In the case of used oil which is exempt under paragraph (1), not later than twenty-four months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall promulgate such standards under this subsection regarding the generation and transportation of used oil which is recycled as may be necessary to protect human health and the environment. In promulgating such regulations with respect to generators, the Administrator shall take into account the effect of such regulations on environmentally acceptable types of used oil recycling and the effect of such regulations on small quantity generators and generators which are small businesses (as defined by the Administrator).

(B) The regulations promulgated under this subsection shall provide that no generator of used oil which is exempt under paragraph (1) from the standards promulgated under section 3001(d), 3002, and 3003 shall be subject to any manifest requirement or any associated recordkeeping and reporting requirement with respect to such used oil if such generator—

(i) either—

(I) enters into an agreement or other arrangement (including an agreement or arrangement with an independent transporter or with an agent of the recycler) for delivery of such used oil to a recycling facility which has a permit under section 3005(c) (or for which a valid permit is deemed to be in effect under subsection (d)), or

(II) recycles such used oil at one or more facilities of the generator which has such a permit under section 3005 of this subtitle (or for which a valid permit is deemed to have been issued under subsection (d) of this section);

(ii) such used oil is not mixed by the generator with other types of hazardous wastes; and

(iii) the generator maintains such records relating to such used oil, including records of agreements or other arrangements for delivery of such used oil to any recycling facility referred to in clause (i)(I), as the Administrator deems necessary to protect human health and the environment.

(3) The regulations under this subsection regarding the transportation of used oil which is exempt from the standards promulgated under section 3001(d), 3002, and 3003 under paragraph (1) shall require the transporters of such used oil to deliver such used oil to a facility which has a valid permit under section 3005 of this subtitle or which is deemed to have a valid permit under subsection (d) of this section. The Administrator shall also establish other standards for such transporters as may be necessary to protect human health and the environment.

(d) PERMITS.—(1) The owner or operator of a facility which recycles used oil which is exempt under subsection (c)(1), shall be deemed to have a permit under this subsection for all such treatment or recycling (and any associated tank or container storage) if such owner and operator comply with standards promulgated by the Administrator under section 3004; except that the Administrator may require such owners and operators to obtain an individual permit under section 3005(c) if he determines that an individual permit is necessary to protect human health and the environment.

(2) Notwithstanding any other provision of law, any generator who recycles used oil which is exempt under subsection (c)(1) shall not be required to obtain a permit under section 3005(c) with respect to such used oil until the Administrator has promulgated standards under section 3004 regarding the recycling of such used oil.

EXPANSION DURING INTERIM STATUS

SEC. 3015. (a) **WASTE PILES.**—The owner or operator of a waste pile qualifying for the authorization to operate under section 3005(e) shall be subject to the same requirements for liners and leachate collection systems or equivalent protection provided in regulations promulgated by the Administrator under section 3004 before October 1, 1982, or revised under section 3004(o) (relating to minimum technological requirements), for new facilities receiving individual permits under subsection (c) of section 3005, with respect to each new unit, replacement of an existing unit, or lateral expansion of an existing unit that is within the waste management area identified in the permit application submitted under section 3005, and with respect to waste received beginning six months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984.

(b) **LANDFILLS AND SURFACE IMPOUNDMENTS.**—(1) The owner or operator of a landfill or surface impoundment qualifying for the authorization to operate under section 3005(e) shall be subject to the requirements of section 3004(o) (relating to minimum technological requirements), with respect to each new unit, replacement of an existing unit, or lateral expansion of an existing unit that is within the waste management area identified in the permit application submitted under this section, and with respect to waste received beginning 6 months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984.

(2) The owner or operator of each unit referred to in paragraph (1) shall notify the Administrator (or the State, if appropriate) at least sixty days prior to receiving waste. The Administrator (or the State) shall require the filing, within six months of receipt of such notice, of an application for a final determination regarding the issuance of a permit for each facility submitting such notice.

(3) In the case of any unit in which the liner and leachate collection system has been installed pursuant to the requirements of this section and in good faith compliance with the Administrator's regulations and guidance documents governing liners and leachate collection systems, no liner or leachate collection system which is different from that which was so installed pursuant to this section shall be required for such unit by the Administrator when issuing the first permit under section 3005 to such facility, except that the Administrator shall not be precluded from requiring installation of a new liner when the Administrator has reason to believe that any liner installed pursuant to the requirements of this section is leaking. The Administrator may, under section 3004, amend the requirements for liners and leachate collection systems required under this section as may be necessary to provide additional protection for human health and the environment.

INVENTORY OF FEDERAL AGENCY HAZARDOUS WASTE FACILITIES

SEC. 3016. (a) Each Federal agency shall undertake a continuing program to compile, publish, and submit to the Administrator (and to the State in the case of sites in States having an authorized hazardous waste program) an inventory of each site which the Federal agency owns or operates or has owned or operated at which hazardous waste is stored, treated, or disposed of or has been disposed of at any time. The inventory shall be submitted every two years beginning January 31, 1986. Such inventory shall be available to the public as provided in section 3007(b). Information previously submitted by a Federal agency under section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, or under section 3005 or 3010 of this Act, or under this section need not be resubmitted except that the agency shall update any previous submission to reflect the latest available data and information. The inventory shall include each of the following:

(1) A description of the location of each site at which any such treatment, storage, or disposal has taken place before the date on which permits are required under section 3005 for such storage, treatment, or disposal, and where hazardous waste has been disposed, a description of hydrogeology of the site and the location of withdrawal wells and surface water within one mile of the site.

(2) Such information relating to the amount, nature, and toxicity of the hazardous waste in each site as may be necessary to determine the extent of any health hazard which may be associated with any site.

(3) Information on the known nature and extent of environmental contamination at each site, including a description of the monitoring data obtained.

(4) Information concerning the current status of the site, including information respecting whether or not hazardous waste is currently being treated, stored, or disposed of at such site (and if not, the date on which such activity ceased) and information respecting the nature of any other activity currently carried out at such site.

(5) A list of sites at which hazardous waste has been disposed and environmental monitoring data has not been obtained, and the reasons for the lack of monitoring data at each site.

(6) A description of response actions undertaken or contemplated at contaminated sites.

(7) An identification of the types of techniques of waste treatment, storage, or disposal which have been used at each site.

(8) The name and address and responsible Federal agency for each site, determined as of the date of preparation of the inventory.

(b) ENVIRONMENTAL PROTECTION AGENCY PROGRAM.—If the Administrator determines that any Federal agency under subsection (a) is not adequately providing information respecting the sites referred to in subsection (a), the Administrator shall notify the chief official of such agency. If within ninety days following such notification, the Federal agency has not undertaken a program to adequately pro-

vide such information, the Administrator shall carry out the inventory program for such agency.

EXPORT OF HAZARDOUS WASTE

SEC. 3017. (a) IN GENERAL.—Beginning twenty-four months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, no person shall export any hazardous waste identified or listed under this subtitle unless

(1)(A) such person has provided the notification required in subsection (c) of this section,

(B) the government of the receiving country has consented to accept such hazardous waste,

(C) a copy of the receiving country's written consent is attached to the manifest accompanying each waste shipment, and

(D) the shipment conforms with the terms of the consent of the government of the receiving country required pursuant to subsection (e), or

(2) the United States and the government of the receiving country have entered into an agreement as provided for in subsection (f) and the shipment conforms with the terms of such agreement.

(b) **REGULATIONS.**—Not later than twelve months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall promulgate the regulations necessary to implement this section. Such regulations shall become effective one hundred and eighty days after promulgation.

(c) **NOTIFICATION.**—Any person who intends to export a hazardous waste identified or listed under this subtitle beginning twelve months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, shall, before such hazardous waste is scheduled to leave the United States, provide notification to the Administrator. Such notification shall contain the following information:

(1) the name and address of the exporter;

(2) the types and estimated quantities of hazardous waste to be exported;

(3) the estimated frequency or rate at which such waste is to be exported; and the period of time over which such waste is to be exported;

(4) the ports of entry;

(5) a description of the manner in which such hazardous waste will be transported to and treated, stored, or disposed in the receiving country; and

(6) the name and address of the ultimate treatment, storage or disposal facility.

(d) **PROCEDURES FOR REQUESTING CONSENT OF THE RECEIVING COUNTRY.**—Within thirty days of the Administrator's receipt of a complete notification under this section, the Secretary of State, acting on behalf of the Administrator, shall—

(1) forward a copy of the notification to the government of the receiving country;

(2) advise the government that United States law prohibits the export of hazardous waste unless the receiving country consents to accept the hazardous waste;

(3) request the government to provide the Secretary with a written consent or objection to the terms of the notification; and

(4) forward to the government of the receiving country a description of the Federal regulations which would apply to the treatment, storage, and disposal of the hazardous waste in the United States.

(e) **CONVEYANCE OF WRITTEN CONSENT TO EXPORTER.**—Within thirty days of receipt by the Secretary of State of the receiving country's written consent or objection (or any subsequent communication withdrawing a prior consent or objection), the Administrator shall forward such a consent, objection, or other communication to the exporter.

(f) **INTERNATIONAL AGREEMENTS.**—Where there exists an international agreement between the United States and the government of the receiving country establishing notice, export, and enforcement procedures for the transportation, treatment, storage, and disposal of hazardous wastes, only the requirements of subsections (a)(2) and (g) shall apply.

(g) **REPORTS.**—After the date of enactment of the Hazardous and Solid Waste Amendments of 1984, any person who exports any hazardous waste identified or listed under section 3001 of this subtitle shall file with the Administrator no later than March 1 of each year, a report summarizing the types, quantities, frequency, and ultimate destination of all such hazardous waste exported during the previous calendar year.

(h) **OTHER STANDARDS.**—Nothing in this section shall preclude the Administrator from establishing other standards for the export of hazardous wastes under section 3002 or section 3003 of this subtitle.

DOMESTIC SEWAGE

SEC. 3018. (a) REPORT.—The Administrator shall, not later than 15 months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, submit a report to the Congress concerning those substances identified or listed under section 3001 which are not regulated under this subtitle by reason of the exclusion for mixtures of domestic sewage and other wastes that pass through a sewer system to a publicly owned treatment works. Such report shall include the types, size and number of generators which dispose of such substances in this manner, the types and quantities disposed of in this manner, and the identification of significant generators, wastes, and waste constituents not regulated under existing Federal law or regulated in a manner sufficient to protect human health and the environment.

(b) **REVISIONS OF REGULATIONS.**—Within eighteen months after submitting the report specified in subsection (a), the Administrator shall revise existing regulations and promulgate such additional regulations pursuant to this subtitle (or any other authority of the Administrator, including section 307 of the Federal Water Pollution Control Act) as are necessary to assure that substances identified or

listed under section 3001 which pass through a sewer system to a publicly owned treatment works are adequately controlled to protect human health and the environment.

(c) *REPORT ON WASTEWATER LAGOONS.*—The Administrator shall, within thirty-six months after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, submit a report to Congress concerning wastewater lagoons at publicly owned treatment works and their effect on groundwater quality. Such report shall include—

- (1) the number and size of such lagoons;
- (2) the types and quantities of waste contained in such lagoons;
- (3) the extent to which such waste has been or may be released from such lagoons and contaminate ground water; and
- (4) available alternatives for preventing or controlling such releases.

The Administrator may utilize the authority of sections 3007 and 3013 for the purpose of completing such report.

(d) *APPLICATION OF SECTION 3010 AND SECTION 3007.*—The provisions of sections 3007 and 3010 shall apply to solid or dissolved materials in domestic sewage to the same extent and in the same manner as such provisions apply to hazardous waste.

EXPOSURE INFORMATION AND HEALTH ASSESSMENTS

SEC. 3019. (a) *EXPOSURE INFORMATION.*—Beginning on the date nine months after the enactment of the Hazardous and Solid Waste Amendments of 1984, each application for a final determination regarding a permit under section 3005(c) for a landfill or surface impoundment shall be accompanied by information reasonably ascertainable by the owner or operator on the potential for the public to be exposed to hazardous wastes or hazardous constituents through releases related to the unit. At a minimum, such information must address:

- (1) reasonably foreseeable potential releases from both normal operations and accidents at the unit, including releases associated with transportation to or from the unit;
- (2) the potential pathways of human exposure to hazardous wastes or constituents resulting from the releases described under paragraph (1); and
- (3) the potential magnitude and nature of the human exposure resulting from such releases.

The owner or operator of a landfill or surface impoundment for which an application for such a final determination under section 3005(c) has been submitted prior to the date of enactment of the Hazardous and Solid Waste Amendments of 1984 shall submit the information required by this subsection to the Administrator (or the State, in the case of a State with an authorized program) no later than the date nine months after such date of enactment.

(b) *HEALTH ASSESSMENTS.*—(1) The Administrator (or the State, in the case of a State with an authorized program) shall make the information required by subsection (a), together with other relevant information, available to the Agency for Toxic Substances and Disease

Registry established by section 104(i) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980.

(2) Whenever in the judgment of the Administrator, or the State (in the case of a State with an authorized program), a landfill or a surface impoundment poses a substantial potential risk to human health, due to the existence of releases of hazardous constituents, the magnitude of contamination with hazardous constituents which may be the result of a release, or the magnitude of the population exposed to such release or contamination, the Administrator or the State (with the concurrence of the Administrator) may request the Administrator of the Agency for Toxic Substances and Disease Registry to conduct a health assessment in connection with such facility and take other appropriate action with respect to such risks as authorized by section 104 (b) and (i) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980. If funds are provided in connection with such request the Administrator of such Agency shall conduct such health assessment.

(c) MEMBERS OF THE PUBLIC.—Any member of the public may submit evidence of releases of or exposure to hazardous constituents from such a facility, or as to the risks or health effects associated with such releases or exposure, to the Administrator of the Agency for Toxic Substances and Disease Registry, the Administrator, or the State (in the case of a State with an authorized program).

(d) PRIORITY.—In determining the order in which to conduct health assessments under this subsection, the Administrator of the Agency for Toxic Substances and Disease Registry shall give priority to those facilities or sites at which there is documented evidence of release of hazardous constituents, at which the potential risk to human health appears highest, and for which in the judgment of the Administrator of such Agency existing health assessment data is inadequate to assess the potential risk to human health as provided in subsection (f).

(e) PERIODIC REPORTS.—The Administrator of such Agency shall issue periodic reports which include the results of all the assessments carried out under this section. Such assessments or other activities shall be reported after appropriate peer review.

(f) DEFINITION.—For the purposes of this section, the term 'health assessments' shall include preliminary assessments of the potential risk to human health posed by individual sites and facilities subject to this section, based on such factors as the nature and extent of contamination, the existence of potential for pathways of human exposure (including ground or surface water contamination, air emissions, and food chain contamination), the size and potential susceptibility of the community within the likely pathways of exposure, the comparison of expected human exposure levels to the short-term and long-term health effects associated with identified contaminants and any available recommended exposure or tolerance limits for such contaminants, and the comparison of existing morbidity and mortality data on diseases that may be associated with the observed levels of exposure. The assessment shall include an evaluation of the risks to the potentially affected population from all sources of such contaminants, including known point or nonpoint sources other than the site or facility in question. A purpose of such preliminary assessments shall be to help determine whether full-

scale health or epidemiological studies and medical evaluations of exposed populations shall be undertaken.

(g) **COST RECOVERY.**—In any case in which a health assessment performed under this section discloses the exposure of a population to the release of a hazardous substance, the costs of such health assessment may be recovered as a cost of response under section 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 from persons causing or contributing to such release of such hazardous substance or, in the case of multiple releases contributing to such exposure, to all such release.

INTERIM CONTROL OF HAZARDOUS WASTE INJECTION

SEC. [7010.] 3020.⁸ (a) **UNDERGROUND SOURCE OF DRINKING WATER.**—No hazardous waste may be disposed of by underground injection—

(1) into a formation which contains (within one-quarter mile of the well used for such underground injection) an underground source of drinking water; or

(2) above such a formation.

The prohibitions established under this section shall take effect 6 months after the enactment of the Hazardous and Solid Waste Amendments of 1984 except in the case of any State in which identical or more stringent prohibitions are in effect before such date under the Safe Drinking Water Act.

(b) **ACTIONS UNDER CERCLA.**—Subsection (a) shall not apply to the injection of contaminated ground water into the aquifer from which it was withdrawn, if—

(1) such injection is—

(A) a response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, or

(B) part of corrective action required under this title intended to clean up such contamination;

(2) such contaminated ground water is treated to substantially reduce hazardous constituents prior to such injection; and

(3) such response action or corrective action will, upon completion, be sufficient to protect human health and the environment.

(c) **ENFORCEMENT.**—In addition to enforcement under [sections 7002 and 7003 of this Act,] provisions of this Act]⁹ the prohibitions established under paragraphs (1) and (2) of subsection (a) shall be enforceable under the Safe Drinking Water Act in any State—

(1) which has adopted identical or more stringent prohibitions under part C of the Safe Drinking Water Act and which has assumed primary enforcement responsibility under that Act for enforcement of such prohibitions; or

(2) in which the Administrator has adopted identical or more stringent prohibitions under the Safe Drinking Water Act and is exercising primary enforcement responsibility under that Act for enforcement of such prohibitions.

⁸ P.L. 99-339, the Safe Drinking Water Act Amendments.

⁹ Language enclosed in light-face brackets indicates an amendment made by P.L. 99-339, the Safe Drinking Water Act Amendments.

(d) The terms "primary enforcement responsibility", "underground source of drinking water", "formation" and "well" have the same meanings as provided in regulations of the Administrator under the Safe Drinking Water Act. The term "Safe Drinking Water Act" means title XIV of the Public Health Service Act.

Subtitle D—State or Regional Solid Waste Plans

OBJECTIVES OF SUBTITLE

SEC. 4001. The objectives of this subtitle are to assist in developing and encouraging methods for the disposal of solid waste which are environmentally sound and which maximize the utilization of valuable resources including energy and materials, which are recoverable from solid waste and to encourage resource conservation. Such objectives are to be accomplished through Federal technical and financial assistance to States or regional authorities for comprehensive planning pursuant to Federal guidelines designed to foster cooperation among Federal, State, and local governments and private industry. *In developing such comprehensive plans, it is the intention of this Act that in determining the size of the waste-to-energy facility, adequate provision shall be given to the present and reasonably anticipated future needs, including those needs created by thorough implementation of section 6002(h), of the recycling and resource recovery interest within the area encompassed by the planning process.*

FEDERAL GUIDELINES FOR PLANS

SEC. 4002. (a) **GUIDELINES FOR IDENTIFICATION OF REGIONS.**—For purposes of encouraging and facilitating the development of regional planning for solid waste management, the Administrator, within one hundred and eighty days after the date of enactment of this section and after consultation with appropriate Federal, State, and local authorities, shall by regulation publish guidelines for the identification of those areas which have common solid waste management problems and are appropriate units for planning regional solid waste management services. Such guidelines shall consider—

- (1) the size and location of areas which should be included,
- (2) the volume of solid waste which should be included, and
- (3) the available means of coordinating regional planning with other related regional planning and for coordination of such region planning into the State plan.

(b) **GUIDELINES FOR STATE PLANS.**—Not later than eighteen months after the date of enactment of this section and after notice and hearing, the Administrator shall, after consultation with appropriate Federal, State, and local authorities, promulgate regulations containing guidelines to assist in the development and implementation of State solid waste management plans (hereinafter in this title referred to as "State plans"). The guidelines shall contain methods for achieving the objectives specified in section 4001. Such guidelines shall be reviewed from time to time, but not less frequently than every three years, and revised as may be appropriate.

(c) **CONSIDERATIONS FOR STATE PLAN GUIDELINES.**—The guidelines promulgated under subsection (b) shall consider—

(1) the varying regional, geologic, hydrologic, climate, and other circumstances under which different solid waste practices are required in order to insure the reasonable protection of the quality of the ground and surface waters from leachate contamination, the reasonable protection of the quality of the surface waters from surface runoff contamination, and the reasonable protection of ambient air quality;

(2) characteristics and conditions of collection, storage, processing, and disposal operating methods, techniques and practices, and location of facilities where such operating methods, techniques, and practices are conducted, taking into account the nature of the material to be disposed;

(3) methods for closing or upgrading open dumps for purposes of eliminating potential health hazards;

(4) population density, distribution, and projected growth;

(5) geographic, geologic, climate, and hydrologic characteristics;

(6) the type and location of transportation;

(7) the profile of industries;

(8) the constituents and generation rates waste;

(9) the political, economic, organizational, financial, and management problems affecting comprehensive solid waste management;

(10) types of resource recovery facilities and resource conservation systems which are appropriate; and

(11) available new and additional market for recovered material and energy and energy resources recovered from solid waste as well as methods for conserving such materials and energy.

REQUIREMENTS FOR APPROVAL OF PLANS

SEC. 4003. (a) MINIMUM REQUIREMENTS.—In order to be approved under section 4007, each State plan must comply with the following minimum requirements—

(1) The plan shall identify (in accordance with section 4006(b)(A) the responsibilities of State, local, and regional authorities in the implementation of the State plan, (B) the distribution of Federal funds to the authorities responsible for development and implementation of State plan, and (C) the means for coordinating regional planning and implementation under the State plan.

(2) The plan shall, in accordance with sections 4004(b) and 4005(a) prohibit the establishment of new open dumps within the State, and contain requirements that all solid waste (including solid waste originating in other States, but not including hazardous waste) shall be (A) utilized for resource recovery or (B) disposed of in sanitary landfills (within the meaning of section 4004(a)) or otherwise disposed of in an environmentally sound manner.

(3) The plan shall provide for the closing or upgrading of all existing open dumps within the State pursuant to the requirements of section 4005.

(4) The plan shall provide for the establishment of such State regulatory powers as may be necessary to implement the plan.

(5) The plan shall provide that no State or local government within the State shall be prohibited, under State or local law, from negotiating and entering into long-term contracts for the supply of solid waste to resource recovery facilities, or for conserving materials or energy by reducing the volume of waste, from entering into long-term contracts for the operation of such facilities, or from securing long-term markets for material and energy recovered from such facilities.

(6) The plan shall provide for such resource conservation or recovery and for the disposal of solid waste in sanitary landfills or any combination of practices so as may be necessary to use or dispose of such waste in a manner that is environmentally sound.

(b) **DISCRETIONARY PLAN PROVISIONS RELATING TO RECYCLED OIL.**—Any State plan submitted under this subtitle may include, at the option of the State, provisions to carry out each of the following:

(1) Encouragement, to the maximum extent feasible and consistent with the protection of the public health and the environment, of the use of recycled oil in all appropriate areas of State and local government.

(2) Encouragement of persons contracting with the State to use recycled oil to the maximum extent feasible, consistent with protection of the public health and the environment.

(3) Informing the public of the uses of recycled oil.

(4) Establishment and implementation of a program (including any necessary licensing of persons and including the use, where appropriate, of manifests) to assure that used oil is collected, transported, treated, stored, reused, and disposed of, in a manner which does not present a hazard to the public health or the environment.

Any plan submitted under this title before the date of the enactment of the Used Oil Recycling Act of 1980 may be amended, at the option of the State, at any time after such date to include any provision referred to in this subsection.

[(b)] (c) ENERGY AND MATERIALS CONSERVATION AND RECOVERY FEASIBILITY PLANNING AND ASSISTANCE.—(1) A State which has a plan approved under this subtitle or which has submitted a plan for such approval shall be eligible for assistance under section 4008(a)(3) if the Administrator determines that under such plan the State will—

(A) analyze and determine the economic and technical feasibility of facilities and programs to conserve resources which contribute to the waste stream or to recovery energy and materials from municipal waste;

(B) analyze the legal, institutional, and economic impediments to the development of systems and facilities for conservation of energy or materials which contribute to the waste stream or for the recovery of energy and materials from municipal waste and make recommendations to appropriate governmental authorities for overcoming such impediments;

(C) assist municipalities within the State in developing plans, programs, and projects to conserve resources or recover energy and materials from municipal waste; and

(D) coordinate the resource conservation and recovery planning under subparagraph (C).

(2) The analysis referred to in paragraph (1)(A) shall include—

(A) the evaluation of, and establishment of priorities among, market opportunities for industrial and commercial users of all types (including public utilities and industrial parks) to utilize energy and materials recovered from municipal waste;

(B) comparisons of the relative costs of energy recovered from municipal waste in relation to the costs of energy derived from fossil fuels and other sources;

(C) studies of the transportation and storage problems and other problems associated with the development of energy and materials recovery technology, including curbside source separation;

(D) the evaluation and establishment of priorities among ways of conserving energy or materials which contribute to the waste stream;

(E) comparison of the relative total costs between conserving resources and disposing of or recovering such waste; and

(F) studies of impediments to resource conservation or recovery, including business practices, transportation requirements, or storage difficulties.

Such studies and analyses shall also include studies of other sources of solid waste from which energy and materials may be recovered or minimized.

(d) SIZE OF WASTE-TO-ENERGY FACILITIES.—Notwithstanding any of the above requirements, it is the intention of this Act and the planning process developed pursuant to this Act that in determining the size of the waste-to-energy facility, adequate provision shall be given to the present and reasonably anticipated future needs of the recycling and resource recovery interest within the area encompassed by the planning process.

CRITERIA FOR SANITARY LANDFILL; SANITARY LANDFILLS REQUIRED FOR ALL DISPOSAL

SEC. 4004. (a) CRITERIA FOR SANITARY LANDFILLS.—Not later than one year after the date of enactment of this section, after consultation with the States, and after notice and public hearings, the Administrator shall promulgate regulations containing criteria for determining which facilities shall be classified as sanitary landfills and which shall be classified as open dumps within the meaning of this Act. At a minimum, such criteria shall provide that a facility may be classified as a sanitary landfill and not an open dump only if there is no reasonable probability of adverse effects on health or the environment from disposal of solid waste at such facility. Such regulations may provide for the classification of the types of sanitary landfills.

(b) DISPOSAL REQUIRED TO BE IN SANITARY LANDFILLS, ETC.—For purposes of complying with section 4003(2) each State plan shall prohibit the establishment of open dumps and contain a require-

ment that disposal of all solid waste within the State shall be in compliance with such section 4003(2).

(c) **EFFECTIVE DATE.**—The prohibition contained in subsection (b) shall take effect on the date six months after the date of promulgation of regulations under subsection (a). [or on the date of approval of the State plan, whichever, is later.]

UPGRADING OF OPEN DUMPS

SEC. 4005. (a) CLOSING OR UPGRADING OF EXISTING OPEN DUMPS.—Upon promulgation of criteria under section 1008(a)(3), any solid waste management practice or disposal of solid waste or hazardous waste which constitutes the open dumping of solid waste or hazardous waste is prohibited, except in the case of any practice or disposal of solid waste under a timetable or schedule for compliance established under this section. *The prohibition contained in the preceding sentence shall be enforceable under section 7002 against persons engaged in the act of open dumping.* For purposes of complying with section 4003(2), and 4003(3) each State plan shall contain a requirement that all existing disposal facilities or sites for solid waste in such State which are open dumps listed in the inventory under subsection (b) shall comply with such measures as may be promulgated by the Administrator to eliminate health hazards and minimize potential health hazards. Each such plan shall establish, for any entity which demonstrates that it has considered other public or private alternatives for solid waste management to comply with the prohibition on open dumping and is unable to utilize such alternatives to so comply, a timetable or schedule for compliance for such practice or disposal of solid waste which specifies a schedule of remedial measures, including an enforceable sequence of actions or operations, leading to compliance with the prohibition on open dumping of solid waste within a reasonable time (not to exceed 5 years from the date of publication of criteria under section 1008(a)(3)).

(b) **INVENTORY.**—To assist the States in complying with section 4003(3), not later than one year after promulgation of regulations under section 4004, the Administrator, with the cooperation of the Bureau of Census shall publish an inventory of all disposal facilities or sites in the United States which are open dumps within the meaning of this Act.

(c) **CONTROL OF HAZARDOUS DISPOSAL.**—(1)(A) *Not later than 36 months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, each State shall adopt and implement a permit program or other system of prior approval and conditions to assure that each solid waste management facility within such State which may receive hazardous household waste or hazardous waste due to the provision of section 3001(d) for small quantity generators (otherwise not subject to the requirement for a permit under section 3005) will comply with the applicable criteria promulgated under section 4004(a) and section 1008(a)(3).*

(B) *Not later than eighteen months after the promulgation of revised criteria under subsection 4004(a) (as required by section 4010(c)), each State shall adopt and implement a permit program or other system or prior approval and conditions, to assure that each*

solid waste management facility within such State which may receive hazardous household waste or hazardous waste due to the provision of section 3001(d) for small quantity generators (otherwise not subject to the requirement for a permit under section 3005) will comply with the criteria revised under section 4004(a).

(C) The Administrator shall determine whether each State has developed an adequate program under this paragraph. The Administrator may make such a determination in conjunction with approval, disapproval or partial approval of a State plan under section 4007.

(2)(A) In any State that the Administrator determines has not adopted an adequate program for such facilities under paragraph (1)(B) by the date provided in such paragraph, the Administrator may use the authorities available under sections 3007 and 3008 of this title to enforce the prohibition contained in subsection (a) of this section with respect to such facilities.

(B) For purposes of this paragraph, the term "requirement of this subtitle" in section 3008 shall be deemed to include criteria promulgated by the Administrator under sections 1008(a)(3) and 4004(a) of this title, and the term "hazardous wastes" in section 3007 shall be deemed to include solid waste at facilities that may handle hazardous household wastes or hazardous wastes from small quantity generators.

PROCEDURE FOR DEVELOPMENT AND IMPLEMENTATION OF STATE PLAN

SEC. 4006. (a) IDENTIFICATION OF REGIONS.—Within one hundred and eighty days after publication of guidelines under section 4002(a) (relating to identification of regions), the Government of each State, after consultation with local elected officials, shall promulgate regulations based on such guidelines identifying the boundaries of each area within the State which, as a result of urban concentrations, geographic conditions, markets, and other factors, is appropriate for carrying out regional solid waste management. Such regulations may be modified from time to time (identifying additional or different regions) pursuant to such guidelines.

(b) IDENTIFICATION OF STATE AND LOCAL AGENCIES AND RESPONSIBILITIES.—(1) Within one hundred and eighty days after the Governor promulgates regulations under subsection (a), for purposes of facilitating the development and implementation of a State plan which will meet the minimum requirements of section 4003, the State, together with appropriate elected officials of general purpose units of local government, shall jointly (A) identify an agency to develop the State plan and identify one or more agencies to implement such a plan, and (B) identify which solid waste management activities will, under such State plan, be planned for and carried out by the State and which such management activities will, under such State plan, be planned for and carried out by a regional or local authority or a combination of regional or local and State authorities. If a multi-functional regional agency authorized by State law to conduct solid waste planning and management (the members of which are appointed by the Governor) is in existence on the date of enactment of this Act, the Governor shall identify such authority for purposes of carrying out within such region clause (A) of

this paragraph. Where feasible, designation of the agency for the affected area designated under section 208 of the Federal Water Pollution Control Act (86 Stat. 839) shall be considered. A State agency identified under this paragraph shall be established or designated by the Governor of such State. Local or regional agencies identified under this paragraph shall be composed of individuals at least a majority of whom are elected local officials.

(2) If planning and implementation agencies are not identified and designated or established as required under paragraph (1) for any affected area, the Governor shall, before the date two hundred and seventy days after promulgation of regulations under subsection (a), establish or designate a State agency to develop and implement the State plan for such area.

(c) INTERSTATE REGIONS.—(1) in the case of any region which, pursuant to the guidelines published by the Administrator under section 4002(a) (relating to identification of regions), would be located in two or more States, the Governors of the respective States, after consultation with local elected officials, shall consult, cooperate, and enter into agreements identifying the boundaries of such region pursuant to subsection (a).

(2) Within one hundred and eighty days after an interstate region is identified by agreement under paragraph (1), appropriate elected officials of general purpose units of local government within such region shall jointly establish or designate an agency to develop a plan for such region. If no such agency is established or designated within such period by such officials, the Governors of the respective States may, by agreement, establish or designate for such purpose a single representative organization including elected officials of general purpose units of local government within such region.

(3) Implementation of interstate regional solid waste management plans shall be conducted by units of local government for any portion of region within their jurisdiction, or by multijurisdictional agencies or authorities designated in accordance with State law, including those designated by agreement by such units of local government for such purpose. If no such unit, agency, or authority is so designated, the respective Governors shall designate or establish a single interstate agency to implement such plan.

(4) For purposes of this subtitle, so much of an interstate regional plan as is carried out within a particular State shall be deemed part of the State plan for such State.

APPROVAL OF STATE PLAN; FEDERAL ASSISTANCE

SEC. 4007. (a) PLAN APPROVAL.—The Administrator shall, within six months after a State plan has been submitted for approval, approve or disapprove the plan. The Administrator shall approve a plan if he determines that—

(1) it meets the requirements of paragraphs (1), (2), (3), and (5) of section 4003; and

(2) it contains provision for revision of such plan, after notice and public hearing, whenever the Administrator, by regulation, determines—

(A) that revised regulations respecting minimum requirements have been promulgated under paragraphs (1), (2), (3), and (5) of section 4003 with which the State plan is not in compliance;

(B) that information has become available which demonstrates the inadequacy of the plan to effectuate the purposes of this subtitle; or

(C) that such revision is otherwise necessary.

The Administrator shall review approved plans from time to time and if he determines that revision or corrections are necessary to bring such plan into compliance with the minimum requirements promulgated under section 4003 (including new or revised requirements), he shall, after notice and opportunity for public hearing, withdraw his approval of such plan. Such withdrawal of approval shall cease to be effective upon the Administrator's determination that such complies with such minimum requirements.

(b) ELIGIBILITY OF STATES FOR FEDERAL FINANCIAL ASSISTANCE.—

(1) The Administrator shall approve a State application for financial assistance under this subtitle, and make grants to such State, if such State and local and regional authorities within such State have complied with the requirements of section 4006 within the period required under such section and if such State has a State plan which has been approved by the Administrator under this subtitle.

(2) The Administrator shall approve a State application for financial assistance under this subtitle, and make grants to such State, for fiscal years 1978 and 1979 if the Administrator determines that the State plan continues to be eligible for approval under subsection (a) and is being implemented by the State.

(3) Upon withdrawal of approval of a State plan under subsection (a), the Administrator shall withhold Federal financial and technical assistance under this subtitle (other than such technical assistance as may be necessary to assist in obtaining the reinstatement of approval) until such time as such approval is reinstated.

(c) EXISTING ACTIVITIES.—Nothing in this subtitle shall be construed to prevent or affect any activities respecting solid waste planning or management which are carried out by State, regional, or local authorities unless such activities are inconsistent with a State plan approved by the Administrator under this subtitle.

FEDERAL ASSISTANCE

SEC. 4008. (a) AUTHORIZATION OF FEDERAL FINANCIAL ASSISTANCE.—(1) There are authorized to be appropriated \$30,000,000 for fiscal year 1978, \$40,000,000 for fiscal year 1979, \$20,000,000 for fiscal year 1980, \$15,000,000 for fiscal year 1981, [and \$20,000,000 for fiscal year 1982] *\$20,000,000 for the fiscal year 1982, and \$10,000,000 for each of the fiscal years 1985 through 1988* for purposes of financial assistance to States and local, regional, and interstate authorities for the development and implementation of plans approved by the Administrator under this subtitle (other than the provisions of such plans referred to in section 4003(b), relating to feasibility planning for municipal waste energy and materials conservation and recovery).

(2)(A) The Administrator is authorized to provide financial assistance to States, counties, municipalities, and intermunicipal agencies and State and local public solid waste management authorities for implementation of programs to provide solid waste management, resource recovery, and resource conservation services and hazardous waste management. Such assistance shall include assistance for facility planning and feasibility studies; expert consultation; surveys and analyses of market needs; marketing of recovered resources; technology assessments; legal expenses; construction feasibility studies; source separation projects; and fiscal or economic investigations or studies; but such assistance shall not include any other element of construction, or any acquisition of land or interest in land, or any subsidy for the price of recovered resources. Agencies assisted under this subsection shall consider existing solid waste management and hazardous waste management services and facilities as well as facilities proposed for construction.

(B) An applicant for financial assistance under this paragraph must agree to comply with respect to the project or program assisted with the applicable requirements of section 4005 and subtitle C of this Act and apply applicable solid waste management practices, methods, and levels of control consistent with any guidelines published pursuant to section 1008 of this Act. Assistance under this paragraph shall be available only for programs certified by the State to be consistent with any applicable State or areawide solid waste management plan or program. Applicants for technical and financial assistance under this section shall not preclude or foreclose consideration of programs for the recovery of recyclable materials through source separation or other resource recovery techniques.

(C) There are authorized to be appropriated \$15,000,000 for each of the fiscal years 1978 and 1979 for purposes of this section. There are authorized to be appropriated \$10,000,000 for fiscal year 1980, \$10,000,000 for fiscal year 1981, [and \$10,000,000 for fiscal year 1982] *\$10,000,000 for fiscal year 1982, and \$10,000,000 for each of the fiscal years 1985 through 1988* for purposes of this paragraph.

(3)(A) There is authorized to be appropriated for the fiscal year beginning October 1, 1981, and for each fiscal year thereafter before October 1, 1986, \$4,000,000 for purposes of making grants to States to carry out section 4003(b). No amount may be appropriated for such purposes for the fiscal year beginning on October 1, 1986, or for any fiscal year thereafter.

(B) Assistance provided by the Administrator under this paragraph shall be used only for the purposes specified in section 4003(b). Such assistance may not be used for purposes of land acquisition, final facility design, equipment purchase, construction, startup or operation activities.

(C) Where appropriate, any State receiving assistance under this paragraph may make all or any part of such assistance available to municipalities within the State to carry out the activities specified in section 4003(b)(1) (A) and (B).

(D) *There are authorized—*

(i) to be made available \$15,000,000 out of funds appropriated for fiscal year 1985, and

(ii) to be appropriated for each of the fiscal years 1986 through 1988, \$20,000,000

for grants to States (and where appropriate to regional, local, and interstate agencies) to implement programs requiring compliance by solid waste management facilities with the criteria promulgated under section 4004(a) and section 1008(a)(3) and with the provisions of section 4005. To the extent practicable, such programs shall require such compliance not later than thirty-six months after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984.

(b) STATE ALLOTMENT.—The sums appropriated in any fiscal year under subsection (a)(1) be allotted by the Administrator among all States, in the ratio that the population in each State bears to the population in all of the States, except that no State shall receive less than one-half of 1 per centum of the sums so allotted in any fiscal year. No State shall receive any grant under this section during any fiscal year when its expenditures of non-Federal funds for other than nonrecurrent expenditures for solid waste management control programs will be less than its expenditures were for such programs during fiscal year 1975, except that such funds may be reduced by an amount equal to their proportionate share of any general reduction of State spending ordered by the Governor or legislature of such State. No State shall receive any grant for solid waste management programs unless the Administrator is satisfied that such grant will be so used as to supplement and, to the extent practicable, increase the level of State, local, regional, or other non-Federal funds that would in the absence of such grant be made available for the maintenance of such programs.

(c) DISTRIBUTION OF FEDERAL FINANCIAL ASSISTANCE WITHIN THE STATE.—The Federal assistance allotted to the States under subsection (b) shall be allocated by the State receiving such funds to State, local, regional, and interstate authorities carrying out planning and implementation of the State plan. Such allocation shall be based upon the responsibilities of the respective parties as determined pursuant to section 4006(b).

(d) TECHNICAL ASSISTANCE.—(1) The Administrator may provide technical assistance to State and local governments for purposes of developing and implementing State plans. Technical assistance respecting resource recovery and conservation may be provided through resource recovery and conservation panels, established in the Environmental Protection Agency under subtitle B, to assist the State and local governments with respect to particulate resource recovery and conservation projects under consideration and to evaluate their effect on the State plan.

(2) In carrying out this subsection, the Administrator is authorized to provide technical assistance to States, municipalities, regional authorities, and intermunicipal agencies upon request, to assist in the removal or modification of legal, institutional, and economic impediments which have the effect of impeding the development of systems and facilities to recover energy and materials from municipal waste or to conserve energy or materials which contribute to the waste stream. Such impediments may include—

(A) laws, regulations, and policies, including State and local procurement policies, which are not favorable to resource conservation and recovery policies, systems, and facilities;

(B) impediments to the financing of facilities to conserve or recover energy and materials from municipal waste through the exercise of State and local authority to issue revenue bonds and the use of State and local credit assistance; and

(C) impediments to institutional arrangements necessary to undertake projects for the conservation or recovery of energy and materials from municipal waste, including the creation of special districts, authorities, or corporations where necessary having the power to secure the supply of waste of a project, to conserve resources, to implement the project, and to undertake related activities.

[2] (3) In carrying out this subsection, the Administrator may, upon request, provide technical assistance to States to assist in the removal or modification of legal, institutional, economic, and other impediments to the recycling of used oil. Such impediments may include laws, regulations, and policies, including State procurement policies, which are not favorable to the recycling of used oil.

(e) SPECIAL COMMUNITIES.—(1) The Administrator, in cooperation with State and local officials, shall identify local governments within the United States (A) having a solid waste disposal facility (i) which is owned by the unit of local government, (ii) for which an order has been issued by the State to cease receiving solid waste for treatment, storage, or disposal, and (iii) which is subject to a State-approved end-use recreation plan, and (B) which are located over an aquifer which is the source of drinking water for any person or public water system and which has serious environmental problems resulting from the disposal of such solid waste, including possible methane migration;

(2) There is authorized to be appropriated to the Administrator \$2,500,000 for the fiscal year 1980, [and \$1,500,000 for each of the fiscal years 1981 and 1982] *\$1,500,000 for each of the fiscal years 1981 and 1982, and \$500,000 for each of the fiscal years 1985 through 1988* to make grants to be used for containment and stabilization of solid waste located at the disposal sites referred to in paragraph (1). Not more than one community in any State shall be eligible for grants under this paragraph and not more than one project in any State shall be eligible for such grants. No unit of local government shall be eligible for grants under this paragraph with respect to any site which exceeds 65 acres in size.

(f) ASSISTANCE TO MUNICIPALITIES FOR ENERGY AND MATERIALS CONSERVATION AND RECOVERY PLANNING ACTIVITIES.—(1) The Administrator is authorized to make grants to municipalities, regional authorities, and intermunicipal agencies to carry out activities described in subparagraph (A) and (B) of section 4003(b)(1). Such grants may be made only pursuant to an application submitted to the Administrator by the municipality which application has been approved by the State and determined by the State to be consistent with any State plan approved or submitted under this subtitle or any other appropriate planning carried out by the State.

(2) There is authorized to be appropriated for the fiscal year beginning October 1, 1981, and for each fiscal year thereafter before

October 1, 1986, \$8,000,000 for purposes of making grants to municipalities under this subsection. No amount may be appropriated for such purposes for the fiscal year beginning on October 1, 1986, or for any fiscal year thereafter.

(3) Assistance provided by the Administrator under this subsection shall be used only for the purposes specified in paragraph (1). Such assistance may not be used for purposes of land acquisition, final facility design, equipment purchases, construction, startup or operation activities.

[(f)] (g) ASSISTANCE TO STATES FOR DISCRETIONARY PROGRAM FOR RECYCLED OIL.—(1) The Administrator may make grants to States, which have a State plan approved under section 4007, or which have submitted a State plan for approval under such section, if such plan includes the discretionary provisions described in section 4003(b). Grants under this subsection shall be for purposes of assisting the State in carrying out such discretionary provisions. No grant under this subsection may be used for construction or for the acquisition of land or equipment.

(2) Grants under this subsection shall be allotted among the States in the same manner as provided in the first sentence of subsection (b).

(3) No grant may be made under this subsection unless an application therefor is submitted to, and approved by, the Administrator. The application shall be in such form, be submitted in such manner, and contain such information as the Administrator may require.

(4) For purposes of making grants under this subsection, there are authorized to be appropriated \$5,000,000 for fiscal year 1982 **[(and \$5,000,000 for fiscal year 1983.)]** *\$5,000,000 for fiscal year 1983, and \$5,000,000 for each of the fiscal years 1985 through 1988.*

RURAL COMMUNITIES ASSISTANCE

SEC. 4009. (a) **IN GENERAL.**—The Administrator shall make grants to States to provide assistance to municipalities with a population of five thousand or less, or counties with a population of ten thousand or less or less than twenty persons per square mile and not within a metropolitan area, for solid waste management facilities (including equipment) necessary to meet the requirements of section 4005 of this Act or restrictions on open burning or other requirements arising under the Clean Air Act or the Federal Water Pollution Control Act. Such assistance shall only be available.

(1) to any municipality or county which could not feasibly be included in a solid waste management system or facility serving an urbanized, multijurisdictional area because of its distance from such systems;

(2) where existing or planned solid waste management services or facilities are unavailable or insufficient to comply with the requirements of section 4005 of this Act; and

(3) for systems which are certified by the State to be consistent with any plans or programs established under any State or areawide planning process.

(b) ALLOTMENT.—The Administrator shall allot the sums appropriated to carry out this section in any fiscal year among the States in accordance with regulations promulgated by him on the basis of the average of the ratio which the population of rural areas of each State bears to the total population of rural areas of all the States, the ratio which the population of counties in each State having less than twenty persons per square mile bears to the total population of such counties in all the States, and the ratio which the population of such low-density counties in each State having 33 per centum or more of all families with incomes not in excess of 125 per centum of the poverty level bears to the total population of such counties in all the States.

(c) LIMIT.—The amount of any grant under this section shall not exceed 75 per centum of the costs of the project. No assistance under this section shall be available for the acquisition of land or interest in land.

(d) APPROPRIATIONS.—There are authorized to be appropriated \$25,000,000 for each of the fiscal years 1978 and 1979 to carry out this section. There are authorized to be appropriated \$10,000,000 for the fiscal year 1980 and \$15,000,000 for each of the fiscal years 1981 and 1982 to carry out this section.

ADEQUACY OF CERTAIN GUIDELINES AND CRITERIA

SEC. 4010. (a) STUDY.—The Administrator shall conduct a study of the extent of which the guidelines and criteria under this Act (other than guidelines and criteria for facilities to which subtitle C applies) which are applicable to solid waste management and disposal facilities, including, but not limited to landfills and surface impoundments, are adequate to protect human health and the environment from ground water contamination. Such study shall include a detailed assessment of the degree to which the criteria under section 1008(a) and the criteria under section 4004 regarding monitoring, prevention of contamination, and remedial action are adequate to protect ground water and shall also include recommendation with respect to any additional enforcement authorities which the Administrator, in consultation with the Attorney General, ~~deems necessary~~ for such purpose.

(b) REPORT.—Not later than thirty-six months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall submit a report to the Congress setting forth the results of the study required under this section, together with any recommendations made by the Administrator on the basis of such study.

(c) REVISIONS OF GUIDELINES AND CRITERIA.—Not later than March 31, 1988, the Administrator shall promulgate revisions of the criteria promulgated under paragraph (1) of section 4004(a) and under section 1008(a)(3) for facilities that may receive hazardous household wastes or hazardous wastes from small quantity generators under section 3001(d). The criteria shall be those necessary to protect human health and the environment and may take into account the practicable capability of such facilities. At a minimum such revisions for facilities potentially receiving such wastes should require ground water monitoring as necessary to detect contamina-

tion, establish criteria for the acceptable location of new or existing facilities, and provide for corrective action as appropriate.

Subtitle E—Duties of the Secretary of Commerce in Resource and Recovery

FUNCTIONS

SEC. 5001. The Secretary of Commerce shall encourage greater commercialization of proven resource recovery technology by providing—

- (1) accurate specifications for recovered materials;
- (2) stimulation of development of markets for recovered materials;
- (3) promotion of proven technology; and
- (4) a forum for the exchange of technical and economic data relating to resource recovery facilities.

DEVELOPMENT OF SPECIFICATIONS FOR SECONDARY MATERIALS

SEC. 5002. The Secretary of Commerce, acting through the National Bureau of Standards, and in conjunction with national standards-setting organizations in resource recovery, shall, after public hearings, and not later than two years after September 1, 1979 publish guidelines for the development of specifications for the classification of materials recovered from waste which were destined for disposal. The specifications shall pertain to the physical and chemical properties and characteristics of such materials with regard to their use in replacing virgin materials in various industrial, commercial, and governmental uses. In establishing such guidelines the Secretary shall also, to the extent feasible, provide such information as may be necessary to assist Federal agencies with procurement of items containing recovered materials. The Secretary shall continue to cooperate with national standards-setting organizations, as may be necessary, to encourage the publication, promulgation and updating of standards for recovered materials and for the use of recovered materials in various industrial, commercial, and governmental uses.

DEVELOPMENT OF MARKETS FOR RECOVERED MATERIALS

SEC. 5003. The Secretary of Commerce shall within two years after September 1, 1979 take such actions as may be necessary to—

- (1) identify the geographical location of existing or potential markets for recovered materials;
- (2) identify the economic and technical barriers to the use of recovered materials; and
- (3) encourage the development of new uses for recovered materials.

TECHNOLOGY PROMOTION

SEC. 5004. The Secretary of Commerce is authorized to evaluate the commercial feasibility of resource recovery facilities and to publish the results of such evaluation, and to develop a data base for purposes of assisting persons in choosing such a system.

NONDISCRIMINATION REQUIREMENT

SEC. 5005. In establishing any policies which may affect the development of new markets for recovered materials and in making any determination concerning whether or not to impose monitoring or other controls on any marketing or transfer of recovered materials, the Secretary of Commerce may consider whether to establish the same or similar policies or impose the same or similar monitoring or other controls on virgin materials.

AUTHORIZATION OF APPROPRIATIONS

SEC. 5006. There are authorized to be appropriated to the Secretary of Commerce \$5,000,000 for each of fiscal years 1980, 1981, and 1982 and *\$1,500,000 for each of the fiscal years 1985 through 1988* to carry out the purposes of this subtitle.

Subtitle F—Federal Responsibilities

APPLICATION OF FEDERAL, STATE, AND LOCAL LAW TO FEDERAL FACILITIES

SEC. 6001. Each department, agency, and instrumentality of the executive, legislative, and judicial branches of the Federal Government (1) having jurisdiction over any solid waste management facility or disposal site, or (2) engaged in any activity resulting or, which may result, in the disposal or management of solid waste or hazardous waste shall be subject to, and comply with, all Federal, State, interstate, and local requirements, both substantive and procedural (including and requirement for permits or reporting or any provisions for injunctive relief and such sanctions as may be imposed by a court to enforce such relief), respecting control and abatement of solid waste or hazardous waste disposal in the same manner, and to the same extent, as any person is subject to such requirements, including the payment of reasonable service charges. Neither the United States, nor any agent, employee, or officer thereof, shall be immune or exempt from any process or sanction of any State or Federal Court with respect to the enforcement of any such injunctive relief. The President may exempt any solid waste management facility of any department, agency, or instrumentality in the executive branch from compliance with such a requirement if he determines it to be in the paramount interest of the United States to do so. No such exemption shall be granted due to lack of appropriation unless the President shall have specifically requested such appropriation as a part of the budgetary process and the Congress shall have failed to make available such requested appropriation. Any exemption shall be for a period not in excess of one year, but additional exemptions may be granted for periods not to exceed one year upon the President's making a determination. The President shall report each January to the Congress all exemptions from the requirements of this section granted during the preceding calendar year, together with his reason for granting each such exemption.

FEDERAL PROCUREMENT

SEC. 6002. (a) APPLICATION OF SECTION.—Except as provided in subsection (b), a procuring agency shall comply with the requirements set forth in this section and any regulations issued under this section, with respect to any purchase or acquisition of a procurement item where the purchase price of the item exceeds \$10,000 or where the quantity of such items or of functionally equivalent items purchased or acquired in the course of the preceding fiscal year was \$10,000 or more.

(b) PROCUREMENT SUBJECT TO OTHER LAW.—Any procurement, by any procuring agency, which is subject to regulations of the Administrator under section 6004 (as promulgated before the date of enactment of this section under comparable provisions of prior law) shall not be subject to the requirements of this section to the extent that such requirements are inconsistent with such regulations.

(c) REQUIREMENTS.—(1) After the date specified in applicable guidelines prepared pursuant to subsection (e) of this section, each procuring agency which procures any items designated in such guidelines shall procure such items composed of the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition (*and in the case of paper, the highest percentage of the postconsumer recovered materials referred to in subsection (h)(1) practicable*), considering such guidelines. The decision not to procure such items shall be based on a determination that such procurement items—

(A) are not reasonably available within a reasonable period of time;

(B) fail to meet the performance standards set forth in the applicable specifications or fail to meet the reasonable performance standards of the procuring agencies; or

(C) are only available at an unreasonable price. Any determination under subparagraph (B) shall be made on the basis of the guidelines of the Bureau of Standards in any case in which such material is covered by such guidelines.

(2) Agencies that generate heat, mechanical, or electrical energy from fossil fuel in systems that have the technical capability of using energy or fuels derived from solid waste as a primary or supplementary fuel shall use such capability to the maximum extent practicable.

(3) After the date specified in any applicable guidelines prepared pursuant to subsection (e) of this section, contracting officers shall require that vendors:

(A) certify that the percentage of recovered materials to be used in the performance of the contract will be at least the amount required by applicable specifications or other contractual requirements and

(B) estimate the percentage of the total material utilized for the performance of the contract which is recovered materials.

(d) SPECIFICATIONS.—All Federal agencies that have the responsibility for drafting or reviewing specifications for procurement items procured by Federal agencies shall—

(1) as expeditiously as possible but in any event no later than **[five years after the date of enactment of this Act,]** *eighteen months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984*, eliminate from such specifications—

(A) any exclusion of recovered materials and

(B) any requirement that items be manufactured from virgin materials; and

(2) within one year after the date of publication of applicable guidelines under subsection (e), or as otherwise specified in such guidelines, assure that such specifications require the use of recovered materials to the maximum extent possible without jeopardizing the intended end use of the item.

(e) **GUIDELINES.**—The Administrator, after consultation with the Administrator of General Services, the Secretary of Commerce (acting through the Bureau of Standards), and the Public Printer, shall prepare, and from time to time revise, guidelines for the use of procuring agencies in complying with the requirements of this section. Such guidelines shall—

(1) designate those items which are or can be produced with recovered materials and whose procurement by procuring agencies will carry out the objectives of this section, *and in the case of paper, provide for maximizing the use of postconsumer recovered materials referred to in subsection (h)(1);* and

(2) set forth recommended practices with respect to the procurement of recovered materials and items containing such materials and with respect to certification by vendors of the percentage of recovered materials used;

and shall provide information as to the availability, relative price and performance of such materials and items and where appropriate shall recommend the level of recovered material to be contained in the procured product. The Administrator shall prepare final guidelines **[for at least three product categories, including paper, by May 1, 1981, and for two additional product categories, including construction materials, by September 30, 1982.]** *for paper within one hundred and eighty days after the enactment of the Hazardous and Solid Waste Amendments of 1984, and for three additional product categories (including tires) by October 1, 1985.* In making the designation under paragraph (1), the Administrator shall consider, but is not limited in his considerations, to—

(A) the availability of such items;

(B) the impact of the procurement of such items by procuring agencies on the volume of solid waste which must be treated, stored or disposed of;

(C) the economic and technological feasibility of producing and using such items; and

(D) other uses for such recovered materials.

(f) **PROCUREMENT OF SERVICES.**—A procuring agency shall, to the maximum extent practicable, manage or arrange for the procurement of solid waste management services in a manner which maximizes energy and resource recovery.

(g) **EXECUTIVE OFFICE.**—The Office of Procurement Policy in the Executive Office of the President, in cooperation with the Administrator, shall implement **[the policy expressed in]** *the requirements*

of this section. It shall be the responsibility of the Office of Procurement Policy to coordinate this policy with other policies for Federal procurement, in such a way as to maximize the use of recovered resources, and to annually report to the Congress on actions taken by Federal agencies and the progress made in the implementation of such policy, and to, every two years beginning in 1984, report to the Congress on actions taken by Federal agencies and the progress made in the implementation of this section, including agency compliance with subsection (d).

(h) **DEFINITION.**—As used in this section, in the case of paper products, the term "recovered materials" includes—

(1) postconsumer materials such as—

(A) paper, paperboard, and fibrous wastes from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; and

(B) all paper, paperboard, and fibrous wastes that enter and are collected from municipal solid waste, and

(2) manufacturing, forest residues, and other wastes such as—

(A) dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel into smaller rolls or rough sheets) including: envelope cuttings, bindery trimmings, and other paper and paperboard waste, resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and

(B) finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others;

(C) fibrous byproducts of harvesting, manufacturing, extractive, or wood-cutting processes, flax, straw, linters, bagasse, slash, and other forest residues;

(D) wastes generated by the conversion of goods made from fibrous material (that is, waste rope from cordage manufacture, textile mill waste, and cuttings); and

(E) fibers recovered from waste water which otherwise would enter the waste stream.

(i) **PROCUREMENT PROGRAM.**—(1) Within one year after the date of publication of applicable guidelines under subsection (e), each procuring agency shall develop an affirmative procurement program which will assure that items composed of recovered materials will be purchased to the maximum extent practicable and which is consistent with applicable provisions of Federal procurement law.

(2) Each affirmative procurement program required under this subsection shall, at a minimum, contain—

(A) a recovered materials preference program;

(B) an agency promotion program to promote the preference program adopted under subparagraph (A);

(C) a program for requiring estimates of the total percentage of recovered material utilized in the performance of a contract;

certification of minimum recovered material content actually utilized, where appropriate; and reasonable verification procedures for estimates and certifications; and

(D) annual review and monitoring of the effectiveness of an agency's affirmative procurement program.

In the case of paper, the recovered materials preference program required under subparagraph (A) shall provide for the maximum use of the post consumer recovered materials referred to in subsection (h)(1).

(3) In developing the preference program, the following options shall be considered for adoption:

(A) *Case-by-Case Policy Development:* Subject to the limitations of subsection (c)(1) (A) through (C), a policy of awarding contracts to the vendor offering an item composed of the highest percentage of recovered materials practicable (and in the case of paper, the highest percentage of the postconsumer recovered materials referred to in subsection (h)(1)). Subject to such limitations, agencies may make an award to a vendor offering items with less than the maximum recovered materials content.

(B) *Minimum Content Standards:* Minimum recovered materials content specifications which are set in such a way as to assure that the recovered materials content (and in the case of paper, the content of postconsumer materials referred to in subsection (h)(1)) required is the maximum available without jeopardizing the intended end use of the item, or violating the limitations of subsection (c)(1) (A) through (C).

Procuring agencies shall adopt one of the options set forth in subparagraphs (A) and (B) or a substantially equivalent alternative, for inclusion in the affirmative procurement program.

COOPERATION WITH THE ENVIRONMENTAL PROTECTION AGENCY

SEC. 6003. (a) **GENERAL RULE.**—All Federal agencies shall assist the Administrator in carrying out his functions under this Act and shall promptly make available all requested information concerning past or present Agency waste management practices and past or present Agency owned, leased, or operated solid or hazardous waste facilities. This information shall be provided in such format as may be determined by the Administrator.

(b) **INFORMATION RELATING TO ENERGY AND MATERIALS CONSERVATION AND RECOVERY.**—The Administrator shall collect, maintain, and disseminate information concerning the market potential of energy and materials recovered from solid waste, including materials obtained through source separation, and information concerning the savings potential of conserving resources contributing to the waste stream. The Administrator shall identify the regions in which the increased substitution of such energy for energy derived from fossil fuels and other sources is most likely to be feasible, and provide information on the technical and economic aspects of developing integrated resource conservation or recovery systems which provide for the recovery of source-separated materials to be recycled or the conservation of resources. The Administrator shall utilize the authorities of subsection (a) in carrying out this subsection.

APPLICABILITY OF SOLID WASTE DISPOSAL GUIDELINE TO EXECUTIVE AGENCIES

SEC. 6004. (a) COMPLIANCE.—(1) If—

(A) an Executive agency (as defined in section 105 of title 5, United States Code) or any unit of the legislative branch of the Federal Government has jurisdiction over any real property or facility the operation or administration of which involves such agency in solid waste management activities, or

(B) such an agency enters into a contract with any person for the operation by such person of any Federal property or facility, and the performance of such contract involves such person in solid waste management activities.

then such agency shall insure compliance with the guidelines recommended under section 1008 and the purposes of this Act in the operation or administration of such property or facility, or the performance of such contract, as the case may be,

(2) Each Executive agency or any unit of the legislative branch of the Federal Government which conducts any activity—

(A) which generates solid waste, and

(B) which, if conducted by a person other than such agency, would require a permit or license from such agency in order to dispose of such solid waste,

shall insure compliance with such guidelines and the purposes of this Act in conducting such activity.

(3) Each Executive agency which permits the use of Federal property for purposes of disposal of solid waste shall insure compliance with such guidelines and the purposes of this Act in the disposal of such waste.

(4) The President or the Committee on House Administration of the House of Representatives and the Committee on Rules and Administration of the Senate with regard to any unit of the legislative branch of the Federal Government, shall prescribe regulations to carry out this subsection.

(b) LICENSES AND PERMITS.—Each Executive agency which issues any license or permit for disposal of solid waste shall, prior to the issuance of such license or permit, consult with the Administrator to insure compliance with guidelines recommended under section 1008 and the purposes of this Act.

Subtitle G—Miscellaneous Provisions

EMPLOYEE PROTECTION

SEC. 7001. (a) GENERAL.—No person shall fire, or in any other way discriminate against, or cause to be fired or discriminated against, any employee or any authorized representative of employees by reason of the fact that such employee or representative has filed, instituted, or caused to be filed or instituted any proceeding under this Act or under any applicable implementation plan, or has testified or is about to testify in any proceeding resulting from the administration or enforcement of the provisions of this Act or of any applicable implementation plan.

(b) REMEDY.—Any employee or a representative of employees who believes that he has been fired or otherwise discriminated

against by any person in violation of subsection (a) of this section may, within thirty days after such alleged violation occurs, apply to the Secretary of Labor for a review of such firing or alleged discrimination. A copy of the application shall be sent to such person who shall be the respondent. Upon receipt of such application, the Secretary of labor shall cause such investigation to be made as he deems appropriate. Such investigation shall provide an opportunity for a public hearing at the request of any party to such review to enable the parties to present information relating to such alleged violation. The parties shall be given written notice of the time and place of the hearing at least five days prior to the hearing. Any such hearing shall be of record and shall be subject to section 554 of title 5 of the United States Code. Upon receiving the report of such investigation, the Secretary of Labor shall make findings of fact. If he finds that such violation did occur, he shall issue a decision, incorporating an order therein and his findings, requiring the party committing such violation to take such affirmative action to abate the violation as the Secretary of Labor deems appropriate, including, but not limited to, the rehiring or reinstatement of the employee or representative of employees to his former position with compensation. If he finds that there was no such violation, he shall issue an order denying the application. Such order issued by the Secretary of Labor under this subparagraph shall be subject to judicial review in the same manner as orders and decisions of the Administrator or subject to judicial review under this Act.

(c) **COSTS.**—Whenever an order is issued under this section to abate such violation, at the request of the applicant, a sum equal to the aggregate amount of all costs and expenses (including the attorney's fees) as determined by the Secretary of Labor, to have been reasonably incurred by the applicant for, or in connection with, the institution and prosecution of such proceedings, shall be assessed against the person committing such violation.

(d) **EXCEPTION.**—This section shall have no application to any employee who, acting without direction from his employer (or his agent) deliberately violates any requirement of this Act.

(e) **EMPLOYMENT SHIFTS AND LOSS.**—the Administrator shall conduct continuing evaluations of potential loss or shifts of employment which may result from the administration or enforcement of the provisions of this Act and applicable implementation plans, including, where appropriate, investigating threatened plant closures or reductions in employment allegedly resulting from such administration or enforcement. Any employee who is discharged, or laid off, threatened with discharge or layoff, or otherwise discriminated against by any person because of the alleged results of such administration or enforcement, or any representative of such employee, may request the Administrator to conduct a full investigation of the matter. The Administrator shall thereupon investigate the matter and, at the request of any party, shall hold public hearings on not less than five days' notice, and shall at such hearings require the parties, including the employer involved, to present information relating to the actual or potential effect of such administration or enforcement on employment, and on any alleged discharge, layoff, or other discrimination and the detailed reasons or justification therefore. Any such hearing shall be of record and shall be

subject to section 554 of title 5 of the United States Code. Upon receiving the report of such investigation, the Administrator shall make findings of fact as to the effect of such administration or enforcement on employment and on the alleged discharge, layoff, or discrimination and shall make such recommendations as he deems appropriate. Such report findings, and recommendations shall be available to the public. Nothing in this subsection shall be construed to require or authorize the Administrator or any State to modify or withdraw any standard, limitation, or any any other requirement of this Act or any applicable implementation plan.

(f) OCCUPATIONAL SAFETY AND HEALTH.—In order to assist the Secretary of Labor and the Director of the National Institute for Occupational Safety and Health in carrying out their duties under the Occupational Safety and Health Act of 1970, the Administrator shall—

(1) provide the following information, as such information becomes available, to the Secretary and the Director:

(A) the identity of any hazardous waste generation, treatment, storage, disposal facility or site where cleanup is planned or underway;

(B) information identifying the hazards to which persons working at a hazardous waste generation, treatment, storage, disposal facility or site or otherwise handling hazardous waste may be exposed, the nature and extent of the exposure, and methods to protect workers from such hazards; and

(C) incidents of worker injury or harm at a hazardous waste generation, treatment, storage or disposal facility or site; and

(2) notify the Secretary and the Director of the Administrator's receipt of notifications under section 3010 or reports under sections 3002, 3003, and 3004 of this title and make such notifications and reports available to the Secretary and the Director.

CITIZEN SUITS

SEC. 7002. (a) IN GENERAL.—Except as provided in subsection (b) or (c) of this section, any person may commence a civil action on his own behalf—

(1)(A) against any person (including (a) the United States, and (b) any other governmental instrumentality or agency, to the extent permitted by the eleventh amendment to the Constitution) who is alleged to be in violation of any permit, standard, regulation, condition, requirement, *prohibition*, or order which has become effective pursuant to this Act; or

(B) against any person, including the United States and any other governmental instrumentality or agency, to the extent permitted by the eleventh amendment to the Constitution, and including any past or present generator, past or present transporter, or past or present owner or operator of a treatment, storage, or disposal facility, who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may

present an imminent and substantial endangerment to health or the environment; or

(2) against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this Act which is not discretionary with the Administrator.

Any action under paragraph (a)(1) of this subsection shall be brought in the district court for the district in which the alleged violation occurred *or the alleged endangerment may occur*. Any action brought under paragraph (a)(2) of this subsection may be brought in the district court for the district in which the alleged violation occurred or in the District Court of the District of Columbia. The district court shall have jurisdiction, without regard to the amount in controversy or the citizenship of the parties, [to enforce such regulation or order, or to order the administrator to perform such act or duty as the case may be] *to enforce the permit, standard, regulation, condition, requirement, prohibition, or order, referred to in paragraph (1)(A), to restrain any person who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste referred to in paragraph (1)(B), to order such person to take such other action as may be necessary, or both, or to order the Administrator to perform the act or duty referred to in paragraph (2), as the case may be, and to apply any appropriate civil penalties under section 3008 (a) and (g).*

[(b) ACTIONS PROHIBITED.—No action may be commenced under paragraph (a)(1) of this section—

[(1) prior to sixty days after the plaintiff has given notice of the violation (A) to the Administrator; (B) to the State in which the alleged violation occurs; and (C) to any alleged violator of such permit, standard, regulation, condition, requirement, or order; or

[(2) if the Administrator or State has commenced and is diligently prosecuting a civil or criminal action in a court of the United States or a State to require compliance with such permit, standard, regulation, condition, requirement, or order: *Provided, however, That in any such action in a court of the United States, any person may intervene as a matter of right.*]

(b) ACTIONS PROHIBITED.—(1) No action may be commenced under subsection (a)(1)(A) of this section—

(A) prior to 60 days after the plaintiff has given notice of the violation to—

(i) the Administrator;

(ii) the State in which the alleged violation occurs; and

(iii) to any alleged violator of such permit, standard, regulation, condition, requirement, prohibition, or order,

except that such action may be brought immediately after such notification in the case of an action under this section respecting a violation of subtitle C of this Act; or

(B) if the Administrator or State has commenced and is diligently prosecuting a civil or criminal action in a court of the United States or a State to require compliance with such permit, standard, regulation, condition, requirement, prohibition, or order.

In any action under subsection (a)(1)(A) in a court of the United States, any person may intervene as a matter of right.

(2)(A) No action may be commenced under subsection (a)(1)(B) of this section prior to ninety days after the plaintiff has given notice of the endangerment to—

- (i) the Administrator;
- (ii) the State in which the alleged endangerment may occur;
- (iii) any person alleged to have contributed or to be contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste referred to in subsection (a)(1)(B),

except that such action may be brought immediately after such notification in the case of an action under this section respecting a violation of subtitle C of this Act.

(B) No action may be commenced under subsection (a)(1)(B) of this section if the Administrator, in order to restrain or abate acts or conditions which may have contributed or are contributing to the activities which may present the alleged endangerment—

- (i) has commenced and is diligently prosecuting an action under section 7003 of this Act or under section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980;
- (ii) is actually engaging in a removal action under section 104 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980;
- (iii) has incurred costs to initiate a Remedial Investigation and Feasibility Study under section 104 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 and is diligently proceeding with a remedial action under that Act; or
- (iv) has obtained a court order (including a consent decree) or issued an administrative order under section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 or section 7003 of this Act pursuant to which a responsible party is diligently conducting a removal action, Remedial Investigation and Feasibility Study (RIFS), or proceeding with a remedial action.

In the case of an administrative order referred to in clause (iv), actions under subsection (a)(1)(B) are prohibited only as to the scope and duration of the administrative order referred to in clause (iv).

(C) No action may be commenced under subsection (a)(1)(B) of this section if the State, in order to restrain or abate acts or conditions which may have contributed or are contributing to the activities which may present the alleged endangerment—

- (i) has commenced and is diligently prosecuting an action under subsection (a)(1)(B);
- (ii) is actually engaging in a removal action under section 104 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980; or
- (iii) has incurred costs to initiate a Remedial Investigation and Feasibility Study under section 104 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 and is diligently proceeding with a remedial action under that Act.

(D) No action may be commenced under subsection (a)(1)(B) by any person (other than a State or local government) with respect to the siting of a hazardous waste treatment, storage, or a disposal facility, nor to restrain or enjoin the issuance of a permit for such facility.

(E) In any action under subsection (a)(1)(B) in a court of the United States, any person may intervene as a matter of right when the applicant claims an interest relating to the subject of the action and he is so situated that the disposition of the action may, as a practical matter, impair or impede his ability to protect that interest, unless the Administrator or the State shows that the applicant's interest is adequately represented by existing parties.

(F) Whenever any action is brought under subsection (a)(1)(B) in a court of the United States, the plaintiff shall serve a copy of the complaint on the Attorney General of the United States and with the Administrator.

(c) NOTICE.—No action may be commenced under paragraph (a)(2) of this section prior to sixty days after the plaintiff has given notice to the Administrator that he will commence such action, except that such action may be brought immediately after such notification in the case of an action under this section respecting a violation of subtitle C of this Act. Notice under this subsection shall be given in such manner as the Administrator shall prescribe by regulation. Any action respecting a violation under this Act may be brought under this section only in the judicial district in which such alleged violation occurs.

(d) INTERVENTION.—In any action under this section the Administrator, if not a party, may intervene as a matter of right.

(e) COSTS.—The court, in issuing any final order in any action brought pursuant to this section or section 7006, may award costs of litigation (including reasonable attorney and expert witness fees) [to any party,] to the prevailing or substantially prevailing party whenever the court determines such an award is appropriate. The court may, if a temporary restraining order or preliminary injunction is sought, require the filing of a bond or equivalent security in accordance with the Federal Rules of Civil Procedure.

(f) OTHER RIGHTS PRESERVED.—Nothing in this section shall restrict any right which any person (or class of persons) may have under any statute or common law to seek enforcement of any standard or requirement relating to the management of solid waste or hazardous waste, or to seek any other relief (including relief against the Administrator or a State agency).

(g) TRANSPORTERS.—A transporter shall not be deemed to have contributed or to be contributing to the handling, storage, treatment, or disposal, referred to in subsection (a)(1)(B) taking place after such solid waste or hazardous waste has left the possession or control of such transporter, if the transportation of such waste was under a sole contractual arrangement arising from a published tariff and acceptance for carriage by common carrier by rail and such transporter has exercised due care in the past or present handling, storage, treatment, transportation and disposal of such waste.

IMMINENT HAZARD

SEC. 7003. (a) **AUTHORITY OF ADMINISTRATOR.**—Notwithstanding any other provision of this Act, upon receipt of evidence that the *past or present* handling, storage, treatment, transportation or disposal of any solid waste or hazardous waste may present an imminent and substantial endangerment to health or the environment, the Administrator may bring suit on behalf of the United States in the appropriate district court **[to immediately restrain any person]** *against any person (including any past or present generator, past or present transporter, or past or present owner or operator of a treatment, storage, or disposal facility) who has contributed or who is contributing to such handling, storage, treatment, transportation, or disposal* **[to stop]** *to restrain such person from such handling, storage, treatment, transportation, or disposal* **[or to take such other action as may be necessary]**, *to order such person to take such other action as may be necessary, or both. A transporter shall not be deemed to have contributed or to be contributing to such handling, storage, treatment, or disposal taking place after such solid waste or hazardous waste has left the possession or control of such transporter if the transportation of such waste was under a sole contractual arrangement arising from a published tariff and acceptance for carriage by common carrier by rail and such transporter has exercised due care in the past or present handling, storage, treatment, transportation and disposal of such waste.* The Administrator shall provide notice to the affected State of any such suit. The Administrator may also, after notice to the affected State, take other action under this section including, but not limited to, issuing such orders as may be necessary to protect public health and the environment.

(b) **VIOLATIONS.**—Any person who willfully violates, or fails or refuses to comply with, any order of the Administrator under subsection (a) may, in an action brought in the appropriate United States district court to enforce such order, be fined not more than \$5,000 for each day in which such violation occurs or such failure to comply continues.

(c) **IMMEDIATE NOTICE.**—Upon receipt of information that there is hazardous waste at any site which has presented an imminent and substantial endangerment to human health or the environment, the Administrator shall provide immediate notice to the appropriate local government agencies. In addition, the Administrator shall require notice of such endangerment to be promptly posted at the site where the waste is located.

(d) **PUBLIC PARTICIPATION IN SETTLEMENTS.**—Whenever the United States or the Administrator proposes to covenant not to sue or to forbear from suit or to settle any claim arising under this section, notice, and opportunity for a public meeting in the affected area, and a reasonable opportunity to comment on the proposed settlement prior to its final entry shall be afforded to the public. The decision of the United States or the Administrator to enter into or not to enter into such Consent Decree, covenant or agreement shall not constitute a final agency action subject to judicial review under this Act or the Administrative Procedure Act.

PETITION FOR REGULATIONS; PUBLIC PARTICIPATION

SEC. 7004. (a) PETITION.—Any person may petition the Administrator for the promulgation, amendment, or repeal of any regulation under this Act. Within a reasonable time following receipt of such petition, the Administrator shall take action with respect to such petition and shall publish notice of such action in the Federal Register, together with the reasons therefor.

(b) PUBLIC PARTICIPATION.—(1) Public participation in the development, revision, implementation, and enforcement of any regulation, guideline, information, or program under this Act shall be provided for, encouraged, and assisted by the Administrator and the States. The Administrator, in cooperation with the States, shall develop and publish minimum guidelines for public participation in such process.

(2) Before the issuing of a permit to any person with any respect to any facility for treatment, storage, or disposal of hazardous wastes under section 3005, the Administrator shall—

(A) cause to be published in major local newspaper of general circulation and broadcast over local radio stations notice of the agency's intention to issue such permit, and

(B) transmit in writing notice of the agency's intention to issue such permit to each unit of local government having jurisdiction over the area in which such facility is proposed to be located and to each State agency having any authority under State law with respect to the construction or operation of such facility.

If within 45 days the Administrator receives written notice of opposition to the agency's intention to issue such permit and a request for a hearing, or if the Administrator determines on his own initiative, he shall hold an informal public hearing (including an opportunity for presentation of written and oral views) on whether he should issue a permit for the proposed facility. Whenever possible the Administrator shall schedule such hearing at a location convenient to the nearest population center to such proposed facility and give notice in the aforementioned manner of the date, time, and subject matter of such hearing. No State program which provides for the issuance of permits referred to in this paragraph may be authorized by the Administrator under section 3006 unless such program provides for the notice and hearing required by the paragraph.

SEPARABILITY

SEC. 7005. If any provision of this Act, or the application of any provision of this Act to any person or circumstance, is held invalid, the application of such provision to other persons or circumstances, and the remainder of this Act, shall not be affected thereby.

JUDICIAL REVIEW

SEC. 7006. (a) REVIEW OF FINAL REGULATIONS AND CERTAIN PETITIONS.—Any judicial review of final regulations promulgated pursuant to this Act and the Administrator's denial of any petition for the promulgation, amendment, or repeal of any regulation under

this Act shall be in accordance with sections 701 through 706 of title 5 of the United States Code, except that—

(1) a petition for review of action of the Administrator in promulgating any regulation, or requirement under this Act or denying any petition for the promulgation, amendment, or repeal of any regulation under this Act may be filed only in the United States Court of Appeals for the District of Columbia, and such petition shall be filed within ninety days from the date of such promulgation or denial, or after such date of such petition for review is based solely on grounds arising after such ninetieth day; action of the Administrator with respect to which review could have been obtained under this subsection shall not be subject to judicial review in civil or criminal proceedings for enforcement; and

(2) in any judicial proceeding brought under this section in which review is sought of a determination under this Act required to be made on the record after notice and opportunity for hearing, if a party seeking review under this act applies to the court for leave to adduce additional evidence, and shows to the satisfaction of the court that the information is material and that there were reasonable grounds for the failure to adduce such evidence in the proceeding before the Administrator, the court may order such additional evidence (and evidence in rebuttal thereof) to be taken before the Administrator, and to be adduced upon the hearing in such manner and upon such terms and conditions as the court may deem proper; the Administrator may modify his findings as to the facts, or make new findings, by reason of the additional evidence so taken, and he shall file with the court such modified or new findings and his recommendation, if any, for the modification or setting aside of his original order, with the return of such additional evidence.

(b) REVIEW OF CERTAIN ACTIONS UNDER SECTION 3005 AND 3006.—Review of the Administrator's action (1) in issuing, denying, modifying, or revoking any permit under section 3005 (*or in modifying or revoking any permit which is deemed to have been issued under section 3012(d)(1)*), or (2) in granting, denying, or withdrawing authorization or interim authorization under section 3006, may be had by any interested person in the Circuit Court of Appeals of the United States for the Federal judicial district in which such person resides or transacts such business upon application by such person. *Action of the Administrator with respect to which review could have been obtained under this subsection shall not be subject to judicial review in civil or criminal proceedings for enforcement.* Any such application shall be made within ninety days from the date of such issuance, denial, modification, revocations, grant, or withdrawal, or after such date only if such application is based solely on grounds which arose after such ninetieth day. Such review shall be in accordance with sections 701 through 706 of title 5 of the United States Code.

GRANTS OR CONTRACTS FOR TRAINING PROJECTS

SEC. 7007. (a) GENERAL AUTHORITY.—The Administrator is authorized to make grants to, and contracts with any eligible organization. For purposes of this section the term "eligible organization" means a State or interstate agency, a municipality, educational institution, and any other organization which is capable of effectively carrying out a project which may be funded by grant under subsection (b) of this section.

(b) PURPOSES.—(1) Subject to the provisions of paragraph (2), grants or contracts may be made to pay all or a part of the costs, as may be determined by the Administrator, of any project operated or to be operated by an eligible organization, which is designed—

(A) to develop, expand, or carry out a program (which may combine training, education, and employment) for training persons for occupations involving the management, supervision, design, operation, or maintenance of solid waste management and resource recovery equipment and facilities; or

(B) to train instructors and supervisory personnel to train or supervise persons in occupations involving the design, operation, and maintenance of solid waste management and resource recovery equipment and facilities.

(2) A grant or contract authorized by paragraph (1) of this subsection may be made only upon application to the Administrator at such time or times and contains such information as he may prescribe, except that no such application shall be approved unless it provides for the same procedures and reports (and access to such reports and to other records) as required by section 207(b) (4) and (5) (as in effect before the date of the enactment of Resource Conservation and Recovery Act of 1976) with respect to applications made under such section (as in effect before the date of the enactment of Resource Conservation and Recovery Act of 1976).

(c) STUDY.—The Administrator shall make a complete investigation and study to determine—

(1) the need for additional trained State and local personnel to carry out plans assisted under this Act and other solid waste and resource recovery programs;

(2) means of using existing training programs to train such personnel; and

(3) the extent and nature of obstacles to employment and occupational advancement in the solid waste management and resource recovery field which may limit either available manpower or the advancement of personnel in such field.

He shall report the results of such investigation and study, including his recommendations to the President and the Congress.

PAYMENTS

SEC. 7008. (a) GENERAL RULE.—Payments of grants under this Act may be made (after necessary adjustment on account of previously made underpayments or overpayments) in advance or by way of reimbursement, and in such installments and on such conditions as the Administrator may determine.

(b) PROHIBITION.—No grant may be made under this Act to any private profitmaking organization.

LABOR STANDARDS

SEC. 7009. No grant for a project of construction under this Act shall be made unless the Administrator finds that the application contains or is supported by reasonable assurance that all laborers and mechanics employed by contractors or subcontractors on projects of the type covered by the Davis-Bacon Act, as amended (40 U.S.C. 276a—276a-5), will be paid wages at rates not less than those prevailing on similar work in the locality as determined by the Secretary of Labor in accordance with that Act; and the Secretary of Labor shall have with respect to the labor standards specified in this section the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 F.R. 3176; 5 U.S.C. 133z-5) and section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 276c).

LAW ENFORCEMENT AUTHORITY

SEC. [7012.] 7010.¹⁰ *The Attorney General of the United States shall, at the request of the Administrator and on the basis of a showing of need, deputize qualified employees of the Environmental Protection Agency to serve as special deputy United States marshals in criminal investigations with respect to violations of the criminal provisions of this Act.*

Subtitle H—Research, Development, Demonstration, and Information

RESEARCH, DEMONSTRATIONS, TRAINING, AND OTHER ACTIVITIES

SEC. 8001. (a) GENERAL AUTHORITY.—The Administrator, alone or after consultation with the Administrator of the Federal Energy Administration, the Administrator of the Energy Research and Development Administration, or the Chairman of the Federal Power Commission, shall conduct, and encourage, cooperate with, and render financial and other assistance to appropriate public (whether Federal, State, interstate, or local) authorities, agencies, and institutions, private agencies and institutions, and individuals in the conduct of, and promote the coordination of, research, investigations, experiments, training, demonstrations, surveys, public education programs, and studies relating to—

- (1) any adverse health and welfare effects of the release into the environment of material present in solid waste, and methods to eliminate such effects;
- (2) the operation and financing of solid waste management programs;
- (3) the planning, implementation, and operation of resource recovery and resource conservation systems and hazardous waste management systems, including the marketing or recovered resources;

¹⁰ P.L. 99-339, Safe Drinking Water Act Amendments.

(4) the production of usable forms of recovered resources, including fuel, from solid waste;

(5) the reduction of the amount of such waste and unsalvageable waste materials;

(6) the development and application of new and improved methods of collecting and disposing of solid waste and processing and recovering materials and energy from solid wastes;

(7) the identification of solid waste components and potential materials and energy recoverable from such waste components;

(8) small scale and low technology solid waste management systems, including but not limited to, resource recovery source separation systems;

(9) methods to improve the performance characteristics of resources recovered from solid waste and the relationship of such performance characteristics to available and potentially available markets for such resources;

(10) improvements in land disposal practices for solid waste (including sludge) which may reduce the adverse environmental effects of such disposal and other aspects of solid waste disposal on land, including means for reducing the harmful environmental effects of earlier and existing landfills, means for restoring areas damaged by such earlier or existing landfills, means for rendering landfills safe for purposes of construction and other uses, and techniques of recovering materials and energy from landfills;

(11) methods for the sound disposal of, or recovery of resources, including energy, from, sludge (including sludge from pollution control and treatment facilities, coal slurry pipelines, and other sources);

(12) methods of hazardous waste management, including methods of rendering such waste environmentally safe; and

(13) any adverse effects on air quality (particularly with regard to the emission of heavy metals) which result from solid waste which is burned (either alone or in conjunction with other substances) for purposes of treatment, disposal, or energy recovery.

(b) **MANAGEMENT PROGRAM.**—(1)(A) In carrying out his functions pursuant to this Act, and any other Federal legislation respecting solid waste or discarded material research, development, and demonstrations, the Administrator shall establish a management program or system to insure the coordination of all such activities and to facilitate and accelerate the process of development of sound new technology (or other discoveries) from the research phase, through development, and into the demonstration phase.

(B) The Administrator shall (i) assist, on the basis of any research projects which are developed with assistance under this Act or without Federal assistance, the construction of pilot plant facilities for the purpose of investigating or testing the technological feasibility of any promising new fuel, energy, or resource recovery or resource conservation method or technology; and (ii) demonstrate each such method and technology that appears justified by an evaluation at such pilot plant stage or at a pilot plant stage developed without Federal assistance. Each such demonstration shall incorporate new or innovative technical advances or shall apply

such advances to different circumstances and conditions, for the purpose of evaluating design concepts or to test the performance, efficiency, and economic feasibility of a particular method or technology under actual operating conditions. Each such demonstration shall be so planned and designed that, if successful, it can be expanded or utilized directly as a full-scale operational fuel, energy, or resource recovery or resource conservation facility.

(2) Any energy-related research, development, or demonstration project for the conversion including bioconversion, of solid waste carried out by the Environmental Protection Agency or by the Energy Research and Development Administration pursuant to this or any other Act shall be administered in accordance with the May 7, 1976, Interagency Agreement between the Environmental Protection and the Energy Research and Development Administration on the Development of Energy from Solid Wastes and specifically, that in accordance with this agreement, (A) for those energy-related projects of mutual interest, planning will be conducted jointly by the Environmental Protection Agency and the Energy Research and Development Administration, following which project responsibility will be assigned to one agency; (B) energy-related portions of projects for recovery of synthetic fuels or other forms of energy from solid waste shall be the responsibility of the Energy Research and Development Administration; (C) the Environmental Protection Agency shall retain responsibility for the environmental, economic, and institutional aspects of solid waste projects and for assurance that such projects are consistent with any applicable suggested guidelines published pursuant to section 1008, and any applicable State or regional solid waste management plan; and (D) any activities undertaken under provisions of section 8002 and 8003 as related to energy; as related to energy or synthetic fuels recovery from waste; or as related to energy conservation shall be accomplished through coordination and consultation with the Energy Research and Development Administration.

(c) **AUTHORITIES.**—(1) In carrying out subsection (a) of this section respecting solid waste research, studies, development, and demonstration, except as otherwise specifically provided in section 8004(d), the Administrator may make grants to or enter into contracts (including contracts for construction) with, public agencies and authorities or private persons.

(2) Contracts for research, development, or demonstrations or for both (including contracts for construction) shall be made in accordance with and subject to the limitations provided with respect to research contracts of the military departments in title 10, United States Code, section 2353, except that the determination, approval, and certification required thereby shall be made by the Administrator.

(3) Any invention made or conceived in the course of, or under, any contract under this Act shall be subject to section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974 to the same extent and in the same manner as inventions made or conceived in the course of contracts under such Act, except that in applying such section, the Environmental Protection Agency shall be substituted for the Energy Research and Development Adminis-

tration and the words "solid waste" shall be substituted for the word "energy" where appropriate.

(4) For carrying out the purpose of this Act the Administrator may detail personnel of the Environmental Protection Agency to agencies eligible for assistance under this section.

SPECIAL STUDIES; PLANS FOR RESEARCH, DEVELOPMENT, AND
DEMONSTRATIONS

SEC. 8002. (a) GLASS AND PLASTIC.—The Administrator shall undertake a study and publish a report on resource recovery from glass and plastic waste, including a scientific, technological, and economic investigation of potential solutions to implement such recovery.

(b) COMPOSITION OF WASTE STREAM.—The Administrator shall undertake a systematic study of the composition of the solid waste stream and of anticipated future changes in the composition of such stream and shall publish a report containing the results of such study and quantitatively evaluating the potential utility of such components.

(c) PRIORITIES STUDY.—For purposes of determining priorities for research on recovery of materials and energy from solid waste and developing materials and energy recovery research, development, and demonstration strategies, the Administrator shall review, and make a study of, the various existing and promising techniques of energy recovery from solid waste (including, but not limited to, waterwall furnace incinerators, dry shredded fuel systems, pyrolysis, densified refuse-derived fuel systems, anerobic digestion, and fuel and feedstock preparation systems). In carrying out such study the Administrator shall investigate with respect to each such technique—

(1) the degree of public need for the potential results of such research, development, or demonstration,

(2) the potential for research, development, and demonstration without Federal action, including the degree of restraint on such potential posed by the risks involved, and

(3) the magnitude of effort and period of time necessary to develop the technology to the point where Federal assistance can be ended.

(d) SMALL-SCALE AND LOW TECHNOLOGY STUDY.—The Administrator shall undertake a comprehensive study and analysis of, and publish a report on, systems of small-scale and low technology solid waste management, including household resource recovery and resource recovery systems which have special application to multiple dwelling units and high density housing and office complexes. Such study and analysis shall include an investigation of the degree to which such systems could contribute to energy conservation.

(e) FRONT-END SOURCE SEPARATION.—The Administrator shall undertake research and studies concerning the compatibility of front-end source separation systems with a high technology resource recovery systems and shall publish a report containing the results of such research and studies.

(f) MINING WASTE.—The Administrator, in consultation with the Secretary of the Interior, shall conduct a detailed and comprehen-

sive study on the adverse effects of solid wastes from active and abandoned surface and underground mines on the environment, including, but not limited to, the effects of such wastes on humans, water, air, health, welfare, and natural resources, and on the adequacy of means and measures currently employed by the mining industry, government agencies, and others to dispose of and utilize such solid wastes and to prevent or substantially mitigate such adverse effects. Not later than thirty-six months after the date of the enactment of the Solid Waste Disposal Act Amendments of 1980 the Administrator shall publish a report of such study and shall include appropriate findings and recommendations for Federal and non-Federal actions concerning such effects. Such report shall be submitted to the Committee on Environment and Public Works of the United States Senate and the Committee on Interstate and Foreign Commerce of the United States House of Representatives. In furtherance of this study, the Administrator shall, as he deems appropriate, review studies and other actions of other Federal agencies concerning such wastes with a view toward avoiding duplication of effort and the need to expedite such study. The Administrator shall publish a report of such study and shall include appropriate findings and recommendations for Federal and non-Federal actions concerning such effects.

(g) **SLUDGE.**—The Administrator shall undertake a comprehensive study and publish a report on sludge. Such study shall include an analysis of—

(1) what types of solid waste (including but not limited to sewage and pollution treatment residues and other residues from industrial operations such as extraction of oil from shale, liquefaction and gasification of coal and coal slurry pipeline operations) shall be classified as sludge;

(2) the effects of air and water pollution legislation on the creation of large volumes of sludge;

(3) the amounts of sludge originating in each State and in each industry producing sludge;

(4) methods of disposal of such sludge, including the cost, efficiency, and effectiveness of such methods;

(5) alternative methods for the use of sludge, including agricultural applications of sludge and energy recovery from sludge; and

(6) methods to reclaim areas which have been used for the disposal of sludge or which have been damaged by sludge.

(h) **TIRES.**—The Administrator shall undertake a study and publish a report respecting discarded motor vehicle tires which shall include an analysis of the problems involved in the collection, recovery of resources including energy, and use of such tires.

(i) **RESOURCE RECOVERY FACILITIES.**—The Administrator shall conduct research and report on the economics of, and impediments, to the effective functioning of resource recovery facilities.

(j) **RESOURCE CONSERVATION COMMITTEE.**—(1) The Administrator shall serve as Chairman of a Committee composed of himself, the Secretary of Commerce, the Secretary of Labor, the Chairman of the Council on Environmental Quality, the Secretary of Treasury, the Secretary of the Interior, the Secretary of Energy, the Chairman of the Council of Economic Advisers, and a representative of

the Office of Management and Budget, which shall conduct a full and complete investigation and study of all aspects of the economic, social, and environmental consequences of resource conservation with respect to—

(A) the appropriateness of recommended incentives and disincentives to foster resource conservation;

(B) the effect of existing public policies (including subsidies and economic incentives and disincentives, percentage depletion allowances, capital gains treatment and other tax incentives and disincentives) upon resource conservation, and the likely effect of the modification or elimination of such incentives and disincentives upon resource conservation;

(C) the appropriateness and feasibility of restricting the manufacture or use of categories of consumer products as a resource conservation strategy;

(D) the appropriateness and feasibility of employing as a resource conservation strategy the imposition of solid waste management charges on consumer products, which charges would reflect the costs of solid waste management services, litter pickup, the value of recoverable components of such product, final disposal, and any social value associated with the nonrecycling or uncontrolled disposal of such product; and

(E) the need for further research, development, and demonstration in the area of resource conservation.

(2) The study required in paragraph (1)(D) may include pilot scale projects, and shall consider and evaluate alternative strategies with respect to—

(A) the product categories on which such charges would be imposed;

(B) the appropriate state in the production of such consumer product at which to levy such charge;

(C) appropriate criteria for establishing such charges for each consumer product category;

(D) methods for the adjustment of such charges to reflect actions such as recycling which would reduce the overall quantities of solid waste requiring disposal; and

(E) procedures for amending, modifying, or revising such charges to reflect changing conditions.

(3) The design for the study required in paragraph (1)(D) of this subsection shall include timetables for the completion of the study. A preliminary report putting forth the study design shall be sent to the President and the Congress within six months following enactment of this section and following reports shall be sent six months thereafter. Each recommendation resulting from the study shall include at least two alternatives to the proposed recommendation.

(4) The results of such investigation and study, including recommendations, shall be reported to the President and the Congress not later than two years after enactment of this subsection.

(5) There are authorized to be appropriated not to exceed \$2,000,000 to carry out this subsection.

(k) **AIRPORT LANDFILLS.**—The Administrator shall undertake a comprehensive study and analysis of and publish a report on systems to alleviate the hazards to aviation from birds congregating and feeding on landfills in the vicinity of airports.

(l) **COMPLETION OF RESEARCH AND STUDIES.**—The Administrator shall complete the research and studies, and submit the reports, required under subsections (b), (c), (d), (e), (f), (g), and (k) not later than October 1, 1978. The Administrator shall complete the research and studies, and submit the reports, required under subsections (a), (h), and (i), not later than October 1, 1979. Upon completion, each study specified in subsections (a) through (k) of this section, the Administrator shall prepare a plan for research, development, and demonstration respecting the findings of the study and shall submit any legislative recommendations resulting from such study to appropriate committees of Congress.

(m) **DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTES ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT, OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.**—(1) The Administrator shall conduct a detailed and comprehensive study and submit a report on the adverse effects, if any, of drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas or geothermal energy on human health and the environment, including, but not limited to, the effects of such wastes on humans, water, air, health, welfare, and natural resources and on the adequacy of means and measures currently employed by the oil and gas and geothermal drilling and production industry. Government agencies, and others to dispose of and utilize such wastes and to prevent or substantially mitigate such adverse effects. Such study shall include an analysis of—

(A) the sources and volume of discarded material generated per year from such wastes;

(B) present disposal practices;

(C) potential danger to human health and the environment from the surface runoff or leachate;

(D) documented cases which prove or have caused danger to human health and the environment from surface runoff or leachate;

(E) alternatives to current disposal methods;

(F) the cost of such alternatives; and

(G) the impact of those alternatives on the exploration for, and development and production of, crude oil and natural gas or geothermal energy.

In furtherance of this study, the Administrator shall, as he deems appropriate, review studies and other actions of other Federal agencies concerning such wastes with a view toward avoiding duplication of effort and the need to expedite such study. The Administrator shall publish a report of such study and shall include appropriate findings and recommendations for Federal and non-Federal actions concerning such effects.

(2) The Administrator shall complete the research and study and submit the report required under paragraph (1) not later than twenty-four months from the date of enactment of the Solid Waste Disposal Act Amendments of 1980. Upon completion of the study, the Administrator shall prepare a summary of the findings of the study, a plan for research, development, and demonstration respecting the findings of the study, and shall submit the findings and the study, along with any recommendations resulting from

such study, to the Committee on Environment and Public Works of the United States Senate and the Committee on Interstate and Foreign Commerce of the United States House of Representatives.

(3) There are authorized to be appropriated not to exceed \$1,000,000 to carry out the provisions of this subsection.

(n) **MATERIALS GENERATED FROM THE COMBUSTION OF COAL AND OTHER FOSSIL FUELS.**—The Administrator shall conduct a detailed and comprehensive study and submit a report on the adverse effects on human health and the environment, if any, of the disposal and utilization of fly ash waste, bottom ash waste, slag waste, flue gas emission control waste, and other byproduct materials generated primarily from the combustion of coal or other fossil fuels. Such study shall include an analysis of—

- (1) the source and volumes of such material generated per year;
- (2) present disposal and utilization practices;
- (3) potential danger, if any, to human health and the environment from the disposal and reuse of such materials;
- (4) documented cases in which danger to human health or the environment from surface runoff or leachate has been proved;
- (5) alternatives to current disposal methods;
- (6) the costs of such alternatives;
- (7) the impact of those alternatives on the use of coal and other natural resources; and
- (8) the current and potential utilization of such materials.

In furtherance of this study, the Administrator shall, as he deems appropriate, review studies and other actions of other Federal and State agencies concerning such material and invite participation by other concerned parties, including industry and other Federal and State agencies, with a view toward avoiding duplication of effort. The Administrator shall publish a report on such study, which shall include appropriate findings, not later than twenty-four months after the enactment of the Solid Waste Disposal Act Amendments of 1980. Such study and findings shall be submitted to the Committee on Environment and Public Works of the United States Senate and the Committee on Interstate and Foreign Commerce of the United States House of Representatives.

(o) **CEMENT KILN DUST WASTE.**—The Administrator shall conduct a detailed and comprehensive study of the adverse effects on human health and the environment, if any, of the disposal of cement kiln dust waste. Such study shall include an analysis of—

- (1) the source and volumes of such materials generated per year;
- (2) present disposal practices;
- (3) potential danger, if any, to human health and the environment from the disposal of such materials;
- (4) documented cases in which danger to human health or the environment has been proved;
- (5) alternatives to current disposal methods;
- (6) the costs of such alternatives;
- (7) the impact of those alternatives on the use of natural resources; and
- (8) the current and potential utilization of such materials.

In furtherance of this study, the Administrator shall, as he deems appropriate, review studies and other actions of other Federal and State agencies concerning such waste or materials and invite participation by other concerned parties, including industry and other Federal and State agencies, with a view toward avoiding duplication of effort. The Administrator shall publish a report of such study, which shall include appropriate findings, not later than thirty-six months after the date of enactment of the Solid Waste Disposal Act Amendments of 1980. Such report shall be submitted to the Committee on Environment and Public Works of the United States Senate and the Committee on Interstate and Foreign Commerce of the United States House of Representatives.

(p) **MATERIALS GENERATED FROM THE EXTRACTION, BENEFICIATION, AND PROCESSING OF ORES AND MINERALS, INCLUDING PHOSPHATE ROCK AND OVERBURDEN FROM URANIUM MINING.**—The Administrator shall conduct a detailed and comprehensive study on the adverse effects on human health and the environment, if any, of the disposal and utilization of solid waste from the extraction, beneficiation, and processing of ores and minerals, including phosphate rock and overburden from uranium mining. Such study shall be conducted in conjunction with the study of mining wastes required by subsection (f) of this section and shall include an analysis of—

- (1) the source and volumes of such materials generated per year;
- (2) present disposal and utilization practices;
- (3) potential danger, if any, to human health and the environment from the disposal and reuse of such materials;
- (4) documented cases in which danger to human health or the environment has been proved;
- (5) alternatives to current disposal methods;
- (6) the costs of such alternatives;
- (7) the impact of those alternatives on the use of phosphate rock and uranium ore, and other natural resources; and
- (8) the current and potential utilization of such materials.

In furtherance of this study, the Administrator shall, as he deems appropriate, review studies and other actions of other Federal and State agencies concerning such waste or materials and invite participation by other concerned parties, including industry and other Federal and State agencies, with a view toward avoiding duplication of effort. The Administrator shall publish a report of such study, which shall include appropriate findings, in conjunction with the publication of the report of the study of mining wastes required to be conducted under subsection (f) of this section. Such report and findings shall be submitted to the Committee on Environment and Public Works of the United States Senate and the Committee on Interstate and Foreign Commerce of the United States House of Representatives.

(q) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated not to exceed \$8,000,000 for the fiscal years 1978 and 1979 to carry out this section other than subsection (j).

(r) **MINIMIZATION OF HAZARDOUS WASTE.**—*The Administrator shall compile, and not later than October 1, 1986, submit to the Congress, a report on the feasibility and desirability of establishing standards of performance or of taking other additional actions*

under this Act to require the generators of hazardous waste to reduce the volume or quantity and toxicity of the hazardous waste they generate, and of establishing with respect to hazardous wastes required management practices or other requirements to assure such wastes are managed in ways that minimize present and future risks to human health and the environment. Such report shall include any recommendations for legislative changes which the Administrator determines are feasible and desirable to implement the national policy established by section 1003.

COORDINATION, COLLECTION, AND DISSEMINATION OF INFORMATION

SEC. 8003. (a) INFORMATION.—The Administrator shall develop, collect, evaluate, and coordinate information on—

- (1) methods and costs of the collection of solid waste;
- (2) solid waste management practices, including data on the different management methods and the cost, operation, and maintenance of such methods;
- (3) the amounts and percentages of resources (including energy) that can be recovered from solid waste by use of various solid waste management practices and various technologies;
- (4) methods available to reduce the amount of solid waste that is generated;
- (5) existing and developing technologies for the recovery of energy or materials from solid waste and the costs, reliability, and the risks associated with such technologies;
- (6) hazardous solid waste, including incidents of damage resulting from the disposal of hazardous solid wastes; inherently and potentially hazardous wastes; methods of neutralizing or properly disposing of hazardous solid wastes; facilities that properly dispose of hazardous wastes;
- (7) methods of financing resources recovery facilities or, sanitary landfills, or hazardous solid waste treatment facilities, whichever is appropriate for the entity developing such facility or landfill (taking into account the amount of solid waste reasonably expected to be available to such entity);
- (8) the availability of markets for the purchase of resources, either materials or energy, recovery from solid waste; and
- (9) research and development projects respecting solid waste management.

(b) LIBRARY.—(1) The Administrator shall establish and maintain a central reference library for (A) the materials collected pursuant to subsection (a) of this section and (B) the actual performance and cost effectiveness records and other data and information with respect to—

- (i) the various methods of energy and resource recovery from solid waste,
- (ii) the various systems and means of resource conservation,
- (iii) the various systems and technologies for collection, transport, storage, treatment, and final disposition of solid waste, and
- (iv) other aspects of solid waste and hazardous solid waste management.

Such central reference library shall also contain, but not be limited to, the model codes and model accounting systems developed under this section, the information collected under subsection (d), and, subject to any applicable requirements of confidentiality, information respecting any aspect of solid waste provided by officers and employees of the Environmental Protection Agency which has been acquired by them in the conduct of their functions under this Act and which may be of value to Federal, State, and local authorities and other persons.

(2) Information in the central reference library shall, to the extent practicable, be collated, analyzed, verified, and published and shall be made available to the State and local governments and other persons at reasonable times and subject to such reasonable charges as may be necessary to defray expenses of making such information available.

(c) **MODEL ACCOUNTING SYSTEM.**—In order to assist State and local governments in determining the cost and revenues associated with the collection and disposal of solid waste and with resource recovery operations, the Administrator shall develop and publish a recommended model cost and revenue accounting system applicable to the solid waste management functions of State and local governments. Such system shall be in accordance with generally accepted accounting principles. The Administrator shall periodically, but not less frequently than once every five years, review such accounting system and revise it as necessary.

(d) **MODEL CODES.**—The Administrator is authorized, in cooperation with appropriate State and local agencies, to recommend model codes, ordinances, and statutes, providing for sound solid waste management.

(e) **INFORMATION PROGRAMS.**—(1) The Administrator shall implement a program for the rapid dissemination of information on solid waste management, hazardous waste management, resources conservation, and methods of resource recovery from solid waste, including the results of any relevant research, investigations, experiments, surveys, studies, or other information which may be useful in the implementation of new or improve solid waste management practices and methods and information on any other technical, managerial, financial, or market aspect of resource conservation and recovery facilities.

(2) The Administrator shall develop and implement educational programs to promote citizen understanding of the need for environmentally sound solid waste management practices.

(f) **COORDINATION.**—In collecting and disseminating information under this section, the Administrator shall coordinate his actions and cooperate to the maximum extent possible with State and local authorities.

(g) **SPECIAL RESTRICTION.**—Upon request, the full range of alternative technologies programs or processes deemed feasible to meet the resource recovery or resource conservation needs of a jurisdiction shall be described in such a manner as to provide a sufficient evaluative basis from which the jurisdiction can make its decisions, but no officer or employee of the Environmental Protection Agency shall, in an official capacity, lobby for or otherwise represent an agency position in favor of resource recovery or resource conserva-

tion, as a policy alternative for adoption into ordinances, codes, regulations, or law by any State or political subdivision thereof.

FULL-SCALE DEMONSTRATION FACILITIES

SEC. 8004. (a) **AUTHORITY.**—The Administrator may enter into contracts with public agencies or authorities or private persons for the construction and operation of a full-scale demonstration facility under this Act, or provide financial assistance in the form of grants to a full-scale demonstration facility under this Act only if the Administrator finds that—

(1) such facility or proposed facility will demonstrate at full-scale a new or significantly improved technology or process, a practical and significant improvement in solid waste management practice, or the technological feasibility and cost effectiveness of an existing, but unproven technology, process, or practice, and will not duplicate any other Federal, State, local, or commercial facility which has been constructed or with respect to which construction has begun (determined as of the date action is taken by the Administrator under this Act),

(2) such contract or assistance meets the requirements of section 8001 and meets other applicable requirements of the Act,

(3) such facility will be able to comply with the guidelines published under section 1008 and with other laws and regulations for the protection of health and the environment,

(4) in the case of a contract for construction or operation, such facility is not likely to be constructed or operated by State, local, or private persons or in the case of an application for financial assistance, such facility is not likely to receive adequate financial assistance from other sources, and

(5) any Federal interest in, or assistance to, such facility will be disposed of or terminated, with appropriate compensation, within such period of time as may be necessary to carry out the basic objectives of this Act.

(b) **TIME LIMITATION.**—No obligation may be made by the Administrator for financial assistance under this subtitle for any full-scale demonstration facility after the date ten years after the enactment of this section. No expenditure of funds for any such full-scale demonstration facility under this subtitle may be made by the Administrator after the date fourteen years after such date of enactment.

(c) **COST SHARING.**—(1) Wherever practicable, in constructing, operating, or providing financial assistance under this subtitle to a full-scale demonstration facility, the Administrator shall endeavor to enter into agreements and make other arrangements for maximum practicable cost sharing with other Federal, State, and local agencies, private persons, or any combination thereof.

(2) The Administrator shall enter into arrangements, wherever practicable, and desirable, to provide monitoring of full-scale solid waste facilities (whether or not constructed or operated under this Act) for purposes of obtaining information concerning the performance, and other aspects, of such facilities. Where the Administrator provides only monitoring and evaluation instruments or personnel (or both) or funds for such instruments or personnel and provides

no other financial assistance to a facility, notwithstanding section 8001(c)(3), title to any invention made or conceived of in the course of developing, constructing, or operating such facility shall not be required to vest in the United States and patents respecting such invention shall not be required to be issued to the United States.

(d) PROHIBITION.—After the date of enactment of this section, the Administrator shall not construct or operate any full-scale facility (except by contract with public agencies or authorities or private persons).

SPECIAL STUDY AND DEMONSTRATION PROJECTS ON RECOVERY OF
USEFUL ENERGY, AND MATERIALS

SEC. 8005. (a) STUDIES.—The Administrator shall conduct studies and develop recommendations for administrative or legislative action on—

(1) means of recovering materials and energy from solid waste, recommended uses of such materials and energy for national or international welfare, including identification of potential markets for such recovered resources, the impact of distribution of such resources on existing markets, and potentials for energy conservation through resource conservation and resource recovery;

(2) actions to reduce waste generation which have been taken voluntarily or in response to governmental action, and those which practically could be taken in the future, and the economic, social, and environmental consequences of such actions;

(3) methods of collection, separation, and containerization which will encourage efficient utilization of facilities and contribute to more effective programs of reduction, reuse, or disposal of wastes;

(4) the use of Federal procurement to develop market demand for recovered resources;

(5) recommended incentives (including Federal grants, loans, and other assistance) and disincentives to accelerate the reclamation or recycling of materials from solid wastes, with special emphasis on motor vehicle hulks;

(6) the effect of existing public policies, including subsidies and economic incentives and disincentives, percentage depletion allowances, capital gains treatment and other tax incentives and disincentives, upon the recycling and reuse of materials, and the likely effect of the modification or elimination of such incentives and disincentives upon the reuse, recycling and conservation of such materials;

(7) the necessity and method of imposing disposal or other charges on packaging, containers, vehicles, and other manufactured goods, which charges would reflect the cost of final disposal, the value of recoverable components of the item, and any social costs associated with nonrecycling or uncontrolled disposal of such items; and

(8) the legal constraints and institutional barriers to the acquisition of land needed for solid waste management, including land for facilities and disposal sites;

(9) in consultation with the Secretary of Agriculture, agricultural waste management problems and practices, the extent of reuse and recovery of resources in such wastes, the prospects for improvement, Federal, State, and local regulations governing such practices, and the economic, social, and environmental consequences of such practices; and

(10) in consultation with the Secretary of the Interior, mining waste management problems, and practices, including an assessment of existing authorities, technologies, and economics, and the environmental and public health consequences of such practices.

(b) **DEMONSTRATION.**—The Administrator is also authorized to carry out demonstration projects to test and demonstrate methods and techniques developed pursuant to subsection (a).

(c) **APPLICATION OF OTHER SECTIONS.**—Section 8001 (b) and (c) shall be applicable to investigations, studies, and projects carried out under this section.

GRANTS FOR RESOURCE RECOVERY SYSTEMS AND IMPROVED SOLID WASTE DISPOSAL FACILITIES

SEC. 8006. (a) AUTHORITY.—The Administrator is authorized to make grants pursuant to this section to any State, municipal, or interstate or intermunicipal agency for the demonstration of resource recovery systems or for the construction of new or improved solid waste disposal facilities.

(b) **CONDITIONS.**—(1) Any grant under this section for the demonstration of a resource recovery system may be made only if it (A) is consistent with any plans which meet the requirements of subtitle D of this Act; (B) is consistent with the guidelines recommended pursuant to section 1008 of this Act; (C) is designed to provide areawide resource recovery systems consistent with the purposes of this Act, as determined by the Administrator, pursuant to regulations promulgated under subsection (d) of this section; and (D) provides an equitable system for distributing the costs associated with construction, operation, and maintenance of any resource recovery system among the users of such system.

(2) The Federal share for any project to which paragraph (1) applies shall not be more than 75 percent.

(c) **LIMITATIONS.**—(1) A grant under this section for the construction of a new or improved solid waste disposal facility may be made only if—

(A) a State or interstate plan for solid waste disposal has been adopted which applies to the area involved, and the facility to be constructed (i) is consistent with such plan, (ii) is included in a comprehensive plan for the area involved which is satisfactory to the Administrator for the purposes of this Act, and (iii) is consistent with the guidelines recommended under section 1008, and

(B) the project advances the state of the art by applying new and improved techniques in reducing the environmental impact of solid waste disposal, in achieving recovery of energy or resources, or in recycling useful materials.

(2) The Federal share for any project to which paragraph (1) applies shall not be more than 50 percent in the case of a project serving an area which includes only one municipality, and not more than 75 percent in any other case.

(d) REGULATIONS.—(1) The Administrator shall promulgate regulations establishing a procedure for awarding grants under this section which—

(A) provides that projects will be carried out in communities of varying sizes, under such conditions as will assist in solving the community waste problems of urban-industrial centers, metropolitan regions, and rural areas, under representative geographic and environmental conditions; and

(B) provides deadlines for submission of, and action on, grant requests.

(2) In taking action on applications for grants under this section, consideration shall be given by the Administrator (A) to the public benefits to be derived by the construction and the propriety of Federal aid in making such grant; (B) to the extent applicable, to the economic and commercial viability of the project (including contractual arrangements with the private sector to market any resources recovered); (C) to the potential of such project for general application to community solid waste disposal problems; and (D) to the use by the applicant of comprehensive regional or metropolitan area planning.

(e) ADDITIONAL LIMITATIONS.—A grant under this section—

(1) may be made only in the amount of the Federal share of (A) the estimated total design and construction costs, plus (B) in the case of a grant to which subsection (b)(1) applies, the first-year operation and maintenance costs;

(2) may not be provided for land acquisition or (except as otherwise provided in paragraph (1)(B) for operating or maintenance costs;

(3) may not be made until the applicant has made provision satisfactory to the Administrator for proper and efficient operation and maintenance of the project (subject to paragraph (1)(B)); and

(4) may be made subject to such conditions and requirements, in addition to those provided in this section, as the Administrator may require to properly carry out his functions pursuant to this Act.

For purposes of paragraph (1), the non-Federal share may be in any form, including, but not limited to, lands or interests therein needed for the project or personal property or services, the values of which shall be determined by the Administrator.

(f) SINGLE STATE.—(1) Not more than 15 percent of the total of funds authorized to be appropriated for any fiscal year to carry out this section shall be granted under this section for projects in any one State.

(2) The Administrator shall prescribe by regulation the manner in which the subsection shall apply to a grant under this section for a project in an area which includes all or part of more than one State.

AUTHORIZATION OF APPROPRIATIONS

SEC. 8007. There are authorized to be appropriated not to exceed \$35,000 for the fiscal year 1978 to carry out the purposes of this subtitle (except for section 8002).

Subtitle I—Regulation of Underground Storage Tanks

DEFINITIONS AND EXEMPTIONS

SEC. 9001. For the purposes of this subtitle—

(1) The term "underground storage tank" means any one or combination of tanks (including underground pipes connected thereto) which is used to contain an accumulation of regulated substances, and the volume of which (including the volume of the underground pipes connected thereto) is 10 per centum or more beneath the surface of the ground. Such term does not include any—

(A) farm or residential tank of 1,000 gallons or less capacity used for storing motor fuel for noncommercial purposes,

(B) tank used for storing heating oil for consumptive use on the premises where stored,

(C) septic tank,

(D) pipeline facility (including gathering line) regulated under—

(i) the Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671, et seq.),

(ii) the Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001, et seq.), or

(iii) which is an intrastate pipeline facility regulated under State laws comparable to the provisions of law referred to in clause (i) or (ii) of this subparagraph,

(E) surface impoundment, pit, pond, or lagoon,

(F) storm water or waste water collection system,

(G) flow-through process tank,

(H) liquid trap or associated gathering lines directly related to oil or gas production and gathering operations, or

(I) storage tank situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

The term "underground storage tank" shall not include any pipes connected to any tank which is described in subparagraphs (A) through (I).

(2) The term "regulated substance" means—

(A) any substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (but not including any substance regulated as a hazardous waste under subtitle C), and

(B) petroleum [.]. [including crude oil or any fraction thereof which is liquid at standard conditions of tempera-

ture and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).¹¹

(3) The term "owner" means—

(A) in the case of an underground storage tank in use on the date of enactment of the Hazardous and Solid Waste Amendments of 1984, or brought into use after that date, any person who owns an underground storage tank used for the storage, use, or dispensing of regulated substances, and

(B) in the case of any underground storage tank in use before the date of enactment of the Hazardous and Solid Waste Amendments of 1984, but no longer in use on the date of enactment of such Amendments, any person who owned such tank immediately before the discontinuation of its use.

(4) The term "operator" means any person in control of, or having responsibility for, the daily operation of the underground storage tank.

(5) The term "release" means any spilling, leaking, emitting, discharging, escaping, leaching, or disposing from an underground storage tank into ground water, surface water or subsurface soils.

(6) The term "person" has the same meaning as provided in section 1004(15), except that such term includes a consortium, a joint venture, and a commercial entity, and the United States Government.

(7) The term "nonoperational storage tank" means any underground storage tank in which regulated substances will not be deposited or from which regulated substances will not be dispensed after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984.

¹¹ (8) The term "petroleum" means petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

NOTIFICATION

SEC. 9002. (a) UNDERGROUND STORAGE TANKS.—(1) Within 18 months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, each owner of an underground storage tank shall notify the State or local agency or department designated pursuant to subsection (b)(1) of the existence of such tank, specifying the age, size, type, location, and uses of such tank.

(2)(A) For each underground storage tank taken out of operation after January 1, 1974, the owner of such tank shall, within eighteen months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, notify the State or local agency, or department designated pursuant to subsection (b)(1) of the existence of such tanks (unless the owner knows the tank subsequently was removed from the ground). The owner of a tank taken out of operation on or before January 1, 1974, shall not be required to notify the State or local agency under this subsection.

¹¹ P.L. 99-449, Superfund.

(B) Notice under subparagraph (A) shall specify, to the extent known to the owner—

- (i) the date the tank was taken out of operation,
- (ii) the age of the tank on the date taken out of operation,
- (iii) the size, type and location of the tank, and
- (iv) the type and quantity of substances left stored in such tank on the date taken out of operation.

(3) Any owner which brings into use an underground storage tank after the initial notification period specified under paragraph (1), shall notify the designated State or local agency or department within thirty days of the existence of such tank, specifying the age, size, type, location and uses of such tank.

(4) Paragraphs (1) through (3) of this subsection shall not apply to tanks for which notice was given pursuant to section 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980.

(5) Beginning thirty days after the Administrator prescribes the form of notice pursuant to subsection (b)(2) and for eighteen months thereafter, any person who deposits regulated substances in an underground storage tank shall reasonably notify the owner or operator of such tank of the owner's notification requirements pursuant to this subsection.

(6) Beginning thirty days after the Administrator issues new tank performance standards pursuant to section 9003(e) of this subtitle, any person who sells a tank intended to be used as an underground storage tank shall notify the purchaser of such tank of the owner's notification requirements pursuant to this subsection.

(b) AGENCY DESIGNATION.—(1) Within one hundred and eighty days after the enactment of the Hazardous and Solid Waste Amendments of 1984, the Governors of each State shall designate the appropriate State agency or department or local agencies or departments to receive the notifications under subsection (a)(1), (2), or (3).

(2) Within twelve months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator, in consultation with State and local officials designated pursuant to subsection (b)(1), and after notice and opportunity for public comment, shall prescribe the form of the notice and the information to be included in the notifications under subsection (a)(1), (2), or (3). In prescribing the form of such notice, the Administrator shall take into account the effect on small businesses and other owners and operators.

¹² (c) STATE INVENTORIES.—Each State shall make 2 separate inventories of all underground storage tanks in such State containing regulated substances. One inventory shall be made with respect to petroleum and one with respect to other regulated substances. In making such inventories, the State shall utilize and aggregate the data in the notification forms submitted pursuant to subsections (a) and (b) of this section. Each State shall submit such aggregated data to the Administrator not later than 270 days after the enactment of the Superfund Amendments and Reauthorization Act of 1986.

¹² P.L. 99-449, Superfund.

RELEASE DETECTION, PREVENTION, AND CORRECTION REGULATIONS

SEC. 9003. (a) REGULATIONS.—The Administrator, after notice and opportunity for public comment, and at least three months before the effective dates specified in subsection (f), shall promulgate release detection, prevention, and correction regulations applicable to all owners and operators of underground storage tanks, as may be necessary to protect human health and the environment.

(b) DISTINCTIONS IN REGULATIONS.—In promulgating regulations under this section, the Administrator may distinguish between types, classes, and ages of underground storage tanks. In making such distinctions, the Administrator may take into consideration factors, including, but not limited to: location of the tanks, soil and climate conditions, uses of the tanks, history of maintenance, age of the tanks, current industry recommended practices, national consensus codes, hydrogeology, water table, size of the tanks, quantity of regulated substances periodically deposited in or dispensed from the tank, the technical capability of the owners and operators, and the compatibility of the regulated substance and the materials of which the tank is fabricated.

(c) REQUIREMENTS.—The regulations promulgated pursuant to this section shall include, but need not be limited to, the following requirements respecting all underground storage tanks—

(1) requirements for maintaining a leak detection system, an inventory control system together with tank testing, or a comparable system or method designed to identify releases in a manner consistent with the protection of human health and the environment;

(2) requirements for maintaining records of any monitoring or leak detection system or inventory control system or tank testing or comparable system;

(3) requirements for reporting of releases and corrective action taken in response to a release from an underground storage tank;

(4) requirements for taking corrective action in response to a release from an underground storage tank; **[and]** ¹³

(5) requirements for the closure of tanks to prevent future releases of regulated substances into the environment **[.]**; and ¹³

¹³ (6) requirements for maintaining evidence of financial responsibility for taking corrective action and compensating third parties for bodily injury and property damage caused by sudden and nonsudden accidental releases arising from operating an underground storage tank.

(d) FINANCIAL RESPONSIBILITY.—**[(1) As he deems necessary or desirable, the Administrator shall promulgate regulations containing requirements for maintaining evidence of financial responsibility as he deems necessary and desirable for taking corrective action and compensating third parties for bodily injury and property damage caused by sudden and nonsudden accidental releases arising from operating an underground storage tank.]** ¹³

[(2)] ¹³ (1) Financial responsibility required by this subsection may be established in accordance with regulations promulgated by

¹³ P.L. 99-499, Superfund.

the Administrator by any one, or any combination, of the following: insurance, guarantee, surety bond, letter of credit, [or] qualification as a self-insurer[.], [or any other method satisfactory to the Administrator.] ¹⁴ In promulgating requirements under this subsection, the Administrator is authorized to specify policy or other contractual terms, conditions, or defenses which are necessary or are unacceptable in establishing such evidence of financial responsibility in order to effectuate the purposes of this subtitle.

[(3)](2) ¹⁵ In any case where the owner or operator is in bankruptcy, reorganization, or arrangement pursuant to the Federal Bankruptcy Code or where with reasonable diligence jurisdiction in the State court of the Federal Courts cannot be obtained over an owner or operator likely to be solvent at the time of judgment, any claim arising from conduct for which evidence of financial responsibility must be provided under this subsection may be asserted directly against the guarantor providing such evidence of financial responsibility. In the case of any action pursuant to this paragraph such guarantor shall be entitled to invoke all rights and defenses which would have been available to the owner or operator if any action had been brought against the owner or operator by the claimant and which would have been available to the guarantor if an action had been brought against the guarantor by the owner or operator.

[(4)](3) ¹⁵ The total liability of any guarantor shall be limited to the aggregate amount which the guarantor has provided as evidence of financial responsibility to the owner or operator under this section. Nothing in this subsection shall be construed to limit any other State or Federal statutory, contractual or common law liability of a guarantor to its owner or operator including, but not limited to, the liability of such guarantor for bad faith either in negotiating or in failing to negotiate the settlement of any claim. Nothing in this subsection shall be construed to diminish the liability of any person under section 107 or 111 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 or other applicable law.

[(5)](4) ¹⁵ For the purpose of this subsection, the term "guarantor" means any person, other than the owner or operator, who provides evidence of financial responsibility for an owner or operator under this subsection.

¹⁵ (5)(A) The Administrator, in promulgating financial responsibility regulations under this section, may establish an amount of coverage for particular classes or categories of underground storage tanks containing petroleum which shall satisfy such regulations and which shall not be less than \$1,000,000 for each occurrence with an appropriate aggregate requirement.

(B) The Administrator may set amounts lower than the amounts required by subparagraph (A) of this paragraph for underground storage tanks containing petroleum which are at facilities not engaged in petroleum production, refining, or marketing and which are not used to handle substantial quantities of petroleum.

¹⁴ Language enclosed in light-face brackets indicates amendment made by P.L. 99-499, Superfund.

¹⁵ P.L. 99-499, Superfund.

(C) In establishing classes and categories for purposes of this paragraph, the Administrator may consider the following factors:

(i) The size, type, location, storage, and handling capacity of underground storage tanks in the class or category and the volume of petroleum handled by such tanks.

(ii) The likelihood of release and the potential extent of damage from any release from underground storage tanks in the class or category.

(iii) The economic impact of the limits on the owners and operators of each such class or category, particularly relating to the small business segment of the petroleum marketing industry.

(iv) The availability of methods of financial responsibility in amounts greater than the amount established by this paragraph.

(v) Such other factors as the Administrator deems pertinent.

(D) The Administrator may suspend enforcement of the financial responsibility requirements for a particular class or category of underground storage tanks or in a particular State, if the Administrator makes a determination that methods of financial responsibility satisfying the requirements of this subsection are not generally available for underground storage tanks in that class or category, and—

(i) steps are being taken to form a risk retention group for such class of tanks; or

(ii) such State is taking steps to establish a fund pursuant to section 9004(c)(1) of this Act to be submitted as evidence of financial responsibility.

A suspension by the Administrator pursuant to this paragraph shall extend for a period not to exceed 180 days. A determination to suspend may be made with respect to the same class or category or for the same State at the end of such period, but only if substantial progress has been made in establishing a risk retention group, or the owners or operators in the class or category demonstrate, and the Administrator finds, that the formation of such a group is not possible and that the State is unable or unwilling to establish such a fund pursuant to clause (ii).

(e) **NEW TANK PERFORMANCE STANDARDS.**—The Administrator shall, not later than three months prior to the effective date specified in subsection (f), issue performance standards for underground storage tanks brought into use on or after the effective date of such standards. The performance standards for new underground storage tanks shall include, but need not be limited to, design, construction, installation, release detection, and compatibility standards.

(f) **EFFECTIVE DATES.**—(1) Regulations issued pursuant to subsection (c) and (d) of this section, and standards issued pursuant to subsection (e) of this section, for underground storage tanks containing regulated substances defined in section 9001(2)(B) (petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure) shall be effective not later than thirty months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984.

(2) Standards issued pursuant to subsection (e) of this section (entitled "New Tank Performance Standards") for underground storage

tanks containing regulated substances defined in section 9001(2)(A) shall be effective not later than thirty-six months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984.

(3) Regulations issued pursuant to subsection (c) of this section (entitled "Requirements") and standards issued pursuant to subsection (d) of this section (entitled "Financial Responsibility") for underground storage tanks containing regulated substances defined in section 9001(2)(A) shall be effective not later than forty-eight months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984.

(g) **INTERIM PROHIBITION.**—(1) Until the effective date of the standards promulgated by the Administrator under subsection (e) and after one hundred and eighty days after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, no person may install an underground storage tank for the purpose of storing regulated substances unless such tank (whether of single or double wall construction)—

(A) will prevent releases due to corrosion or structural failure for the operational life of the tank;

(B) is cathodically protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed in a manner to prevent the release or threatened release of any stored substance; and

(C) the material used in the construction or lining of the tank is compatible with the substance to be stored.

(2) Notwithstanding paragraph (1), if soil tests conducted in accordance with ASTM Standard G57-78, or another standard approved by the Administrator, show that soil resistivity in an installation location is 12,000 ohm/cm or more (unless a more stringent standard is prescribed by the Administrator by rule), a storage tank without corrosion protection may be installed in that location during the period referred to in paragraph (1).

¹⁶ (h) **EPA RESPONSE PROGRAM FOR PETROLEUM.**—

(1) **BEFORE REGULATIONS.**—Before the effective date of regulations under subsection (c), the Administrator (or a State pursuant to paragraph (7)) is authorized to—

(A) require the owner or operator of an underground storage tank to undertake corrective action with respect to any release of petroleum when the Administrator (or the State) determines that such corrective action will be done properly and promptly by the owner or operator of the underground storage tank from which the release occurs; or

(B) undertake corrective action with respect to any release of petroleum into the environment from an underground storage tank if such action is necessary, in the judgment of the Administrator (or the State), to protect human health and the environment.

The corrective action undertaken or required under this paragraph shall be such as may be necessary to protect human health and the environment. The Administrator shall use funds in the Leaking Underground Storage Tank Trust Fund for pay-

¹⁶ P.L. 99-499, Superfund.

ment of costs incurred for corrective action under subparagraph (B), enforcement action under subparagraph (A), and cost recovery under paragraph (6) of this subsection. Subject to the priority requirements of paragraph (3), the Administrator (or the State) shall give priority in undertaking such actions under subparagraph (B) to cases where the Administrator (or the State) cannot identify a solvent owner or operator of the tank who will undertake action properly.

(2) **AFTER REGULATIONS.**—Following the effective date of regulations under subsection (c), all actions or orders of the Administrator (or a State pursuant to paragraph (7)) described in paragraph (1) of this subsection shall be in conformity with such regulations. Following such effective date, the Administrator (or the State) may undertake corrective action with respect to any release of petroleum into the environment from an underground storage tank only if such action is necessary, in the judgment of the Administrator (or the State), to protect human health and the environment and one or more of the following situations exists:

(A) No person can be found, within 90 days or such shorter period as may be necessary to protect human health and the environment, who is—

- (i) an owner or operator of the tank concerned,
- (ii) subject to such corrective action regulations, and
- (iii) capable of carrying out such corrective action properly.

(B) A situation exists which requires prompt action by the Administrator (or the State) under this paragraph to protect human health and the environment.

(C) Corrective action costs at a facility exceed the amount of coverage required by the Administrator pursuant to the provisions of subsections (c) and (d)(5) of this section and, considering the class or category of underground storage tank from which the release occurred, expenditures from the Leaking Underground Storage Tank Trust Fund are necessary to assure an effective corrective action.

(D) The owner or operator of the tank has failed or refused to comply with an order of the Administrator under this subsection or section 9006 or with the order of a State under this subsection to comply with the corrective action regulations.

(3) **PRIORITY OF CORRECTIVE ACTIONS.**—The Administrator (or a State pursuant to paragraph (7)) shall give priority in undertaking corrective actions under this subsection, and in issuing orders requiring owners or operators to undertake such actions, to releases of petroleum from underground storage tanks which pose the greatest threat to human health and the environment.

(4) **CORRECTIVE ACTION ORDERS.**—The Administrator is authorized to issue orders to the owner or operator of an underground storage tank to carry out subparagraph (A) of paragraph (1) or to carry out regulations issued under subsection (c)(4). A State acting pursuant to paragraph (7) of this subsection is authorized to carry out subparagraph (A) of paragraph (1) only

until the State's program is approved by the Administrator under section 9004 of this subtitle. Such orders shall be issued and enforced in the same manner and subject to the same requirements as orders under section 9006.

(5) **ALLOWABLE CORRECTIVE ACTIONS.**—The corrective actions undertaken by the Administrator (or the State pursuant to paragraph (7)) under paragraph (1) or (2) may include temporary or permanent relocation of residents and alternative household water supplies. In connection with the performance of any corrective action under paragraph (1) or (2), the Administrator may undertake an exposure assessment as defined in paragraph (10) of this subsection or provide for such an assessment in a cooperative agreement with a State pursuant to paragraph (7) of this subsection. The costs of any such assessment may be treated as corrective action for purposes of paragraph (6), relating to cost recovery.

(6) **RECOVERY OF COSTS.**—

(A) **IN GENERAL.**—Whenever costs have been incurred by the Administrator, or by a State pursuant to paragraph (7), for undertaking corrective action or enforcement action with respect to the release of petroleum from an underground storage tank, the owner or operator of such tank shall be liable to the Administrator or the State for such costs. The liability under this paragraph shall be construed to be the standard of liability which obtains under section 311 of the Federal Water Pollution Control Act.

(B) **RECOVERY.**—In determining the equities for seeking the recovery of costs under subparagraph (A), the Administrator (or a State pursuant to paragraph (7) of this subsection) may consider the amount of financial responsibility required to be maintained under subsections (c) and (d)(5) of this section and the factors considered in establishing such amount under subsection (d)(5).

(C) **EFFECT ON LIABILITY.**—

(i) **NO TRANSFERS OF LIABILITY.**—No indemnification, hold harmless, or similar agreement or conveyance shall be effective to transfer from the owner or operator of any underground storage tank or from any person who may be liable for a release or threat of release under this subsection, to any other person the liability imposed under this subsection. Nothing in this subsection shall bar any agreement to insure, hold harmless, or indemnify a party to such agreement for any liability under this subsection.

(ii) **NO BAR TO CAUSE OF ACTION.**—Nothing in this subsection, including the provisions of clause (i) of this subparagraph, shall bar a cause of action that an owner or operator or any other person subject to liability under this section, or a guarantor, has or would have, by reason of subrogation or otherwise against any person.

(D) **FACILITY.**—For purposes of this paragraph, the term "facility" means, with respect to any owner or operator, all underground storage tanks used for the storage of petrole-

um which are owned or operated by such owner or operator and located on a single parcel of property (or on any contiguous or adjacent property).

(7) **STATE AUTHORITIES.**—

(A) **GENERAL.**—A State may exercise the authorities in paragraphs (1) and (2) of this subsection, subject to the terms and conditions of paragraphs (3), (5), (9), (10), and (11), and including the authorities of paragraphs (4), (6), and (8) of this subsection if—

(i) the Administrator determines that the State has the capabilities to carry out effective corrective actions and enforcement activities; and

(ii) the Administrator enters into a cooperative agreement with the State setting out the actions to be undertaken by the State.

The Administrator may provide funds from the Leaking Underground Storage Tank Trust Fund for the reasonable costs of the State's actions under the cooperative agreement.

(B) **COST SHARE.**—Following the effective date of the regulations under subsection (c) of this section, the State shall pay 10 per centum of the cost of corrective actions undertaken either by the Administrator or by the State under a cooperative agreement, except that the Administrator may take corrective action at a facility where immediate action is necessary to respond to an imminent and substantial endangerment to human health or the environment if the State fails to pay the cost share.

(8) **EMERGENCY PROCUREMENT POWERS.**—Notwithstanding any other provision of law, the Administrator may authorize the use of such emergency procurement powers as he deems necessary.

(9) **DEFINITION OF OWNER.**—As used in this subsection, the term "owner" does not include any person who, without participating in the management of an underground storage tank and otherwise not engaged in petroleum production, refining, and marketing, holds indicia of ownership primarily to protect the owner's security interest in the tank.

(10) **DEFINITION OF EXPOSURE ASSESSMENT.**—As used in this subsection, the term "exposure assessment" means an assessment to determine the extent of exposure of, or potential for exposure of, individuals to petroleum from a release from an underground storage tank based on such factors as the nature and extent of contamination and the existence of or potential for pathways of human exposure (including ground or surface water contamination, air emissions, and food chain contamination), the size of the community within the likely pathways of exposure, and the comparison of expected human exposure levels to the short-term and long-term health effects associated with identified contaminants and any available recommended exposure or tolerance limits for such contaminants. Such assessment shall not delay corrective action to abate immediate hazards or reduce exposure.

(11) **FACILITIES WITHOUT FINANCIAL RESPONSIBILITY.**—At any facility where the owner or operator has failed to maintain evi-

dence of financial responsibility in amounts at least equal to the amounts established by subsection (d)(5)(A) of this section (or a lesser amount if such amount is applicable to such facility as a result of subsection (d)(5)(B) of this section) for whatever reason the Administrator shall expend no monies from the Leaking Underground Storage Tank Trust Fund to clean up releases at such facility pursuant to the provisions of paragraph (1) or (2) of this subsection. At such facilities the Administrator shall use the authorities provided in subparagraph (A) of paragraph (1) and paragraph (4) of this subsection and section 9006 of this subtitle to order corrective action to clean up such releases. States acting pursuant to paragraph (7) of this subsection shall use the authorities provided in subparagraph (A) of paragraph (1) and paragraph (4) of this subsection to order corrective action to clean up such releases. Notwithstanding the provisions of this paragraph, the Administrator may use monies from the fund to take the corrective actions authorized by paragraph (5) of this subsection to protect human health at such facilities and shall seek full recovery of the costs of all such actions pursuant to the provisions of paragraph (6)(A) of this subsection and without consideration of the factors in paragraph (6)(B) of this subsection. Nothing in this paragraph shall prevent the Administrator (or a State pursuant to paragraph (7) of this subsection) from taking corrective action at a facility where there is no solvent owner or operator or where immediate action is necessary to respond to an imminent and substantial endangerment of human health or the environment.

APPROVAL OF STATE PROGRAMS

SEC. 9004. (a) **ELEMENTS OF STATE PROGRAM.**—Beginning 30 months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, any State may, submit an underground storage tank release detection, prevention, and correction program for review and approval by the Administrator. The program may cover tanks used to store regulated substances referred to in 9001(2) (A) or (B) or both. A State program may be approved by the Administrator under this section only if the State demonstrates that the State program includes the following requirements and standards and provides for adequate enforcement of compliance with such requirements and standards—

(1) requirements for maintaining a leak detection system, an inventory control system together with tank testing, or a comparable system or method designed to identify releases in a manner consistent with the protection of human health and the environment;

(2) requirements for maintaining records of any monitoring or leak detection system or inventory control system or tank testing system;

(3) requirements for reporting of any releases and corrective action taken in response to a release from an underground storage tank;

(4) requirements for taking corrective action in response to a release from an underground storage tank;

(5) requirements for the closure of tanks to prevent future releases of regulated substances into the environment;

(6) requirements for maintaining evidence of financial responsibility for taking corrective action and compensating third parties for bodily injury and property damage caused by sudden and nonsudden accidental releases arising from operating an underground storage tank;

(7) standards of performance for new underground storage tanks; and

(8) requirements—

(A) for notifying the appropriate State agency or department (or local agency or department) designed according to section 9002(b)(1) of the existence of any operational or non-operational underground storage tank; and

(B) for providing the information required on the form issued pursuant to section 9002(b)(2).

(b) **FEDERAL STANDARDS.**—(1) A State program submitted under this section may be approved only if the requirements under paragraphs (1) through (7) of subsection (a) are no less stringent than the corresponding requirements standards promulgated by the Administrator pursuant to section 9003(a).

(2)(A) A State program may be approved without regard to whether or not the requirements referred to in paragraphs (1), (2), (3), and (5) of subsection (a) are less stringent than the corresponding standards under section 9003(a) during the one-year period commencing on the date of promulgation of regulations under section 9003(a) if State regulatory action but no State legislative action is required in order to adopt a State program.

(B) If such State legislative action is required, the State, program may be approved without regard to whether or not the requirements referred to in paragraphs (1), (2), (3), and (5) of subsection (a) are less stringent than the corresponding standards under section 9003(a) during the two-year period commencing on the date of promulgation of regulations under section 9003(a) (and during an additional one-year period after such legislative action if regulations are required to be promulgated by the State pursuant to such legislative action).

(c) **FINANCIAL RESPONSIBILITY.**—(1) Corrective action and compensation programs [financed by fees on tank owners and operators and]¹⁷ administered by State or local agencies or departments may be submitted for approval under subsection (a)(6) as evidence of financial responsibility.

(2) Financial responsibility required by this subsection may be established in accordance with regulations promulgated by the Administrator by any one, or any combination, of the following: insurance, guarantee, surety bond, letter of credit, [or]¹⁷ qualification as a self-insurer[.],¹⁷ [or any other method satisfactory to the Administrator.]¹⁸ In promulgating requirements under this subsection,

¹⁷ P.L. 99-499, Superfund.

¹⁸ Language enclosed in light-face brackets indicates an amendment made by P.L. 99-499, Superfund.

the Administrator is authorized to specify policy of other contractual terms, [including the amount of coverage required for various classes and categories of underground storage tanks pursuant to section 9003(d)(5).]¹⁹ conditions, or defenses which are necessary or are unacceptable in establishing such evidence of financial responsibility in order to effectuate the purposes of this subtitle.

(3) In any case where the owner or operator is in bankruptcy, reorganization, or arrangement pursuant to the Federal Bankruptcy Code or where with reasonable diligence jurisdiction in any State court of the Federal courts cannot be obtained over an owner or operator likely to be solvent at the time of judgment, any claim arising from conduct for which evidence of financial responsibility must be provided under this subsection may be asserted directly against the guarantor providing such evidence of financial responsibility. In the case of any action pursuant to this paragraph such guarantor shall be entitled to invoke all rights and defenses which would have been available to the owner or operator if any action had been brought against the owner or operator by the claimant and which would have been available to the guarantor if an action had been brought against the guarantor by the owner or operator.

(4) The total liability of any guarantor shall be limited to the aggregate amount which the guarantor has provided as evidence of financial responsibility to the owner or operator under this section. Nothing in this subsection shall be construed to limit any other State or Federal statutory, contractual or common law liability of a guarantor to its owner or operator including, but not limited to, the liability of such guarantor for bad faith either in negotiating or in failing to negotiate the settlement of any claim. Nothing in this subsection shall be construed to diminish the liability of any person under section 107 or 111 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 or other applicable law.

(5) For the purpose of this subsection, the term "guarantor" means any person, other than the owner or operator, who provides evidence of financial responsibility for an owner or operator under this subsection.

(d) EPA DETERMINATION.—(1) Within one hundred and eighty days of the date of receipt of a proposed State program, the Administrator shall, after notice and opportunity for public comment, make a determination whether the State's program complies with the provisions of this section and provides for adequate enforcement of compliance with the requirements and standards adopted pursuant to this section.

(2) If the Administrator determines that a State program complies with the provisions of this section and provides for adequate enforcement of compliance with the requirements and standards adopted pursuant to this section, he shall approve the State program in lieu of the Federal program and the State shall have primary enforcement responsibility with respect to requirements of its program.

¹⁹ Language enclosed in light-face brackets indicates an amendment made by P.L. 99-499, Superfund.

(e) *WITHDRAWAL OF AUTHORIZATION.*—Whenever the Administrator determines after public hearing that a State is not administering and enforcing a program authorized under this subtitle in accordance with the provisions of this section, he shall so notify the State. If appropriate action is not taken within a reasonable time, not to exceed one hundred and twenty days after such notification, the Administrator shall withdraw approval of such program and reestablish the Federal program pursuant to this subtitle.

[INSPECTIONS, MONITORING, AND TESTING] INSPECTIONS,
MONITORING, TESTING, AND CORRECTIVE ACTION ²⁰

SEC. 9005. (a) *FURNISHING INFORMATION.*—For the purposes of developing or assisting in the development of any regulation, conducting any study, [taking any corrective action,]²¹ or enforcing the provisions of this subtitle, any owner or operator of an underground storage tank (or any tank subject to study under section 9009 that is used for storing regulated substances) shall, upon request of any officer, employee or representative of the Environmental Protection Agency, duly designated by the Administrator, or upon request of any duly designated officer, employee, or representative of a State [acting pursuant to subsection (h)(7) of section 9003 or]²¹ with an approved program, furnish information relating to such tanks, their associated equipment, their contents, conduct monitoring or testing, [and]²⁰ permit such officer at all reasonable times to have access to, and to copy all records relating to such tanks [and permit such officer to have access for corrective action].²¹ For the purposes of developing or assisting in the development of any regulation, conducting any study, [taking corrective action,]

or enforcing the provisions of this subtitle, such officers, employees, or representatives are authorized—

(1) to enter at reasonable times any establishment or other place where an underground storage tank is located;

(2) to inspect and obtain samples from any person of any regulated substances contained in such tank; [and]²⁰

(3) to conduct monitoring or testing of the tanks, associated equipment, contents, or surrounding soils, air, surface water or ground water [.]; and ²⁰

(4) to take corrective action.²⁰

Each such inspection shall be commenced and completed with reasonable promptness.

(b) *CONFIDENTIALITY.*—(1) Any records, reports, or information obtained from any persons under this section shall be available to the public, except that upon a showing satisfactory to the Administrator (or the State, as the case may be) by any person that records, reports, or information, or a particular part thereof, to which the Administrator (or the State, as the case may be) or any officer, employee, or representative thereof has access under this section if made public, would divulge information entitled to protection under section 1905

²⁰ P.L. 99-499, Superfund.

²¹ Language enclosed in light-face brackets indicates an amendment made by P.L. 99-499, Superfund.

of title 18 of the United States Code, such information or particular portion thereof shall be considered confidential in accordance with the purposes of that section, except that such record, report, document, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this Act, or when relevant in any proceeding under this Act.

(2) Any person not subject to the provisions of section 1905 of title 18 of the United States Code who knowingly and willfully divulges or discloses any information entitled to protection under this subsection shall, upon conviction, be subject to a fine of not more than \$5,000 or to imprisonment not to exceed one year, or both.

(3) In submitting data under this subtitle, a person required to provide such data may—

(A) designate the data which such person believes is entitled to protection under this subsection, and

(B) submit such designated data separately from other data submitted under this subtitle.

A designation under this paragraph shall be made in writing and in such manner as the Administrator may prescribe.

(4) Notwithstanding any limitation contained in this section or any other provision of law, all information reported to, or otherwise obtained, by the Administrator (or any representative of the Administrator) under this Act shall be made available, upon written request of any duly authorized committee of the Congress, to such committee (including records, reports, or information obtained by representatives of the Environmental Protection Agency).

FEDERAL ENFORCEMENT

SEC. 9006. (a) COMPLIANCE ORDERS.—(1) Except as provided in paragraph (2), whenever on the basis of any information, the Administrator determines that any person is in violation of any requirements of this subtitle, the Administrator may issue an order requiring compliance within a reasonable specified time period or the Administrator may commence a civil action in the United States district court in which the violation occurred for appropriate relief, including a temporary or permanent injunction.

(2) In the case of a violation of any requirement of this subtitle where such violation occurs in a State with a program approved under section 9004, the Administrator shall give notice to the State in which such violation has occurred prior to issuing an order or commencing a civil action under this section.

(3) If a violator fails to comply with an order under this subsection within the time specified in the order, he shall be liable for a civil penalty of not more than \$25,000 for each day of continued noncompliance.

(b) PROCEDURE.—Any order issued under this section shall become final unless, no later than thirty days after the order is served, the person or persons named therein request a public hearing. Upon such request the Administrator shall promptly conduct a public hearing. In connection with any proceeding under this section the Administrator may issue subpoenas for the attendance and testimo-

ny of witnesses and the production of relevant papers, books, and documents, and may promulgate rules for discovery procedures.

(c) **CONTENTS OF ORDER.**—Any order issued under this section shall state with reasonable specificity the nature of the violation, specify a reasonable time for compliance, and assess a penalty, if any, which the Administrator determines is reasonable taking into account the seriousness of the violation and any good faith efforts to comply with the applicable requirements.

(d) **CIVIL PENALTIES.**—(1) Any owner who knowingly fails to notify or submit^{ts} false information pursuant to section 9002(a) shall be subject to a civil penalty not to exceed \$10,000 for each tank for which notification is not given or false information is submitted.

(2) Any owner or operator of an underground storage tank who fails to comply with—

(A) any requirement or standard promulgated by the Administrator under section 9003;

(B) any requirement or standard of a State program approved pursuant to section 9004; or

(C) the provisions of section 9003(g) (entitled "Interim Prohibition")

shall be subject to a civil penalty not to exceed \$10,000 for each tank for each day of violation.

FEDERAL FACILITIES

SEC. 9007. (a) APPLICATION OF SUBTITLE.—Each department, agency, and instrumentality of the executive, legislative, and judicial branches of the Federal Government having jurisdiction over any underground storage tank shall be subject to and comply with all Federal, State, interstate, and local requirements, applicable to such tank, both substantive and procedural, in the same manner, and to the same extent, as any other person is subject to such requirements, including payment of reasonable service charges. Neither the United States, nor any agent, employee, or officer thereof, shall be immune or exempt from any process or sanction of any State or Federal court with respect to the enforcement of any such injunctive relief.

(b) **PRESIDENTIAL EXEMPTION.**—The President may exempt any underground storage tanks of any department, agency, or instrumentality in the executive branch from compliance with such a requirement if he determines it to be in the paramount interest of the United States to do so. No such exemption shall be granted due to lack of appropriation unless the President shall have specifically requested such appropriation as a part of the budgetary process and the Congress shall have failed to make available such requested appropriations. Any exemption shall be for a period not in excess of one year, but additional exemptions may be granted for periods not to exceed one year upon the President's making a new determination. The President shall report each January to the Congress all exemptions from the requirements of this section granted during the preceding calendar year, together with his reason for granting each such exemption.

[STATE AUTHORITY

[SEC. 9008. Nothing in this subtitle shall preclude or deny any right of any State or political subdivision thereof to adopt or enforce any regulation, requirement or standard of performance respecting underground storage tanks that is more stringent than a regulation, requirement, or standard of performance in effect under this subtitle.] ²²

STATE AUTHORITY

SEC. 9008. Nothing in this subtitle shall preclude or deny any right of any State or political subdivision thereof to adopt or enforce any regulation, requirement, or standard of performance respecting underground storage tanks that is more stringent than a regulation, requirement, or standard of performance in effect under this subtitle or to impose any additional liability with respect to the release of regulated substances within such State or political subdivision.

STUDY OF UNDERGROUND STORAGE TANKS

SEC. 9009. (a) PETROLEUM TANKS.—Not later than twelve months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall complete a study of underground storage tanks used for the storage of regulated substances defined in section 9001(2)(B).

(b) OTHER TANKS.—Not later than thirty-six months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall complete a study of all other underground storage tanks.

(c) ELEMENTS OF STUDIES.—The studies under subsections (a) and (b) shall include an assessment of the ages, types (including methods of manufacture, coatings, protection systems, the compatibility of the construction materials and the installation methods) and locations (including the climate of the locations) of such tanks; soil conditions, water tables, and the hydrogeology of tank locations; the relationship between the foregoing factors and the likelihood of releases from underground storage tanks; the effectiveness and costs of inventory systems, tank testing, and leak detection systems; and such other factors as the Administrator deems appropriate.

(d) FARM AND HEATING OIL TANKS.—Not later than thirty-six months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall conduct a study regarding the tanks referred to in section 9001(1) (A) and (B). Such study shall include estimates of the number and location of such tanks and an analysis of the extent to which there may be releases or threatened releases from such tanks into the environment.

(e) REPORTS.—Upon completion of the studies authorized by this section, the Administrator shall submit reports to the President and to the Congress containing the results of the studies and recommendations respecting whether or not such tanks should be subject to the preceding provisions of this subtitle.

²² P.L. 99-499, Superfund.

(f) *REIMBURSEMENT.*—(1) *If any owner or operator (excepting an agency, department, or instrumentality of the United States Government, a State or a political subdivision thereof) shall incur costs, including the loss of business opportunity, due to the closure or interruption of operation of an underground storage tank solely for the purpose of conducting studies authorized by this section, the Administrator shall provide such person fair and equitable reimbursement for such costs.*

(2) *All claims for reimbursement shall be filed with the Administrator not later than ninety days after the closure or interruption which gives rise to the claim.*

(3) *Reimbursements made under this section shall be from funds appropriated by the Congress pursuant to the authorization contained in section 2007(g).*

(4) *For purposes of judicial review, a determination by the Administrator under this subsection shall be considered final agency action.*

AUTHORIZATION OF APPROPRIATIONS

SEC. 9010. For authorization of appropriations to carry out this subtitle, see section 2007(g).

THE FOLLOWING PROVISIONS OF PUBLIC LAW 98-616 DO NOT AMEND THE SOLID WASTE DISPOSAL ACT

SEC. 221. (a) * * *

* * * * *

(b) The Administrator of the Environmental Protection Agency shall undertake activities to inform and educate the waste generators of their responsibilities under the amendments made by this section during the period within thirty months after the enactment of the Hazardous and Solid Waste Amendments of 1984 to help assure compliance.

(c) The Administrator of the Environmental Protection Agency in cooperation with the States shall conduct a study of hazardous waste identified or listed under section 3001 of the Solid Waste Disposal Act which is generated by individual generators in total quantities for each generator during any calendar month of less than one thousand kilograms. The Administrator may require from such generators information as may be necessary to conduct the study. Such study shall include a characterization of the number and type of such generators, the quantity and characteristics of hazardous waste generated by such generators, State requirements applicable to such generators, the individual and industry waste management practices of such generators, the potential costs of modifying those practices and the impact of such modifications on national treatment and disposal facility capacity, and the threat to human health and the environment and the employees of transporters or others involved in solid waste management posed by such hazardous wastes or such management practices. Such study shall be submitted to the Congress not later than April 1, 1985.

(d) The Administrator of the Environmental Protection Agency shall cause to be studied the existing manifest system for hazardous wastes as it applies to small quantity generators and recommend whether the current system shall be retained or whether a new system should be introduced. The study shall include an analysis of the cost versus the benefits of the system studied as well as an analysis of the ease of retrieving and collating information and identifying a given substance. Finally, any new proposal shall include a list of those standards that are necessary to protect human health and the environment. Such study shall be submitted to the Congress not later than April 1, 1987.

(e) The Administrator of the Environmental Protection Agency, in conjunction with the Secretary of Transportation, shall prepare and submit to the Congress a report on the feasibility of easing the administrative burden on small quantity generators, increasing compliance with statutory and regulatory requirements, and simplifying enforcement efforts through a program of licensing hazardous waste transporters to assume the responsibilities of small quantity generators relating to the preparation of manifests and associated recordkeeping and reporting requirements. The report shall examine the appropriate licensing requirements under such a program including the need for financial assurances by licensed transporters and shall make recommendations on provisions and requirements for such a program including the appropriate division of responsibilities between the Department of Transportation and the Environmental Protection Administration. Such report shall be submitted to the Congress not later than April 1, 1987.

(f)(1) The Administrator of the Environmental Protection Agency shall, in consultation with the Secretary of Education, the States, and appropriate educational associations, conduct a comprehensive study of problems associated with the accumulation, storage and disposal of hazardous wastes from educational institutions. The study shall include an investigation of the feasibility and availability of environmentally sound methods for the treatment, storage or disposal of hazardous waste from such institutions, taking into account the types and quantities of such waste which are generated by these institutions, and the nonprofit nature of these institutions.

(2) The Administrator shall submit a report to the Congress containing the findings of the study carried out under paragraph (1) not later than April 1, 1987.

(3) For purposes of this subsection—

(A) the term "hazardous waste" means hazardous waste which is listed or identified under Section 3001 of the Solid Waste Disposal Act;

(B) the term "educational institution" includes, but shall not be limited to,

(i) secondary schools as defined in section 198(a)(7) of the Elementary and Secondary Education Act of 1965; and

(ii) institutions of higher education as defined in section 1201(a) of the Higher Education Act of 1965.

TITLE VII—OTHER PROVISIONS

REPORT TO CONGRESS ON INJECTION OF HAZARDOUS WASTE

SEC. 701. (a) The Administrator, in cooperation with the States, shall compile and, not later than six months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, submit to the Committee on Environment and Public Works of the United States Senate and the Committee on Energy and Commerce of the United States House of Representatives, an inventory of all wells in the United States which inject hazardous wastes. The inventory shall include the following information:

- (1) the location and depth of each well;
- (2) engineering and construction details of each, including the thickness and composition of its casing, the width and content of the annulus, and pump pressure and capacity;
- (3) the hydrogeological characteristics of the overlying and underlying strata, as well as that into which the waste is injected;
- (4) the location and size of all drinking water aquifers penetrated by the well, or within a one-mile radius of the well or within two hundred feet below the well injection point;
- (5) the location, capacity, and population served by each well providing drinking or irrigation water which is within a five-mile radius of the injection well;
- (6) the nature and volume of the waste injected during the one-year period immediately preceding the date of the report;
- (7) the dates and nature of the inspections of the injection well conducted by independent third parties or agents of State, Federal, or local government;
- (8) the name and address of all owners and operators of the well and any disposal facility associated with it;
- (9) the identification of all wells at which enforcement actions have been initiated under this Act (by reason of well failure, operator error, ground water contamination or for other reasons) and an identification of the wastes involved in such enforcement actions; and
- (10) such other information as the Administrator may, in his discretion, deem necessary to define the scope and nature of hazardous waste disposal in the United States through underground injection.

(b) In fulfilling the requirements of paragraphs (3) through (5) of subsection (a), the Administrator need only submit such information as can be obtained from currently existing State records and from site visits to at least twenty facilities containing wells which inject hazardous waste.

(c) The States shall make available to the Administrator such information as he deems necessary to accomplish the objectives of this section.

EXTENDING THE USEFUL LIFE OF SANITARY LANDFILLS

SEC. 702. Section 8002 of the Solid Waste Disposal Act is amended by adding the following new subsection after subsection (r) thereof:

"(s) **EXTENDING LANDFILL LIFE AND REFUSING LANDFILLED AREAS.**—The Administrator shall conduct detailed, comprehensive studies of methods to extend the useful life of sanitary landfills and to better use sites in which filled or closed landfills are located. Such studies shall address—

"(1) methods to reduce the volume of materials before placement in landfills;

"(2) more efficient systems for depositing waste in landfills;

"(3) methods to enhance the rate of decomposition of solid waste in landfills, in a safe and environmentally acceptable manner;

"(4) methane production from closed landfill units;

"(5) innovative uses of closed landfill sites, including use for energy production such as solar or wind energy and use for metals recovery;

"(6) potential for use of sewage treatment sludge in reclaiming landfilled areas; and

"(7) methods to coordinate use of a landfill owned by one municipality by nearby municipalities, and to establish equitable rates for such use, taking into account the need to provide future landfill capacity to replace that so used.

The Administrator is authorized to conduct demonstrations in the areas of study provided in this subsection. The Administrator shall periodically report on the results of such studies, with the first such report not later than October 1, 1986. In carrying out this subsection, the Administrator need not duplicate other studies which have been completed and may rely upon information which has previously been compiled."

URANIUM MILL TAILINGS

SEC. 703. Nothing in the Hazardous and Solid Waste Amendments of 1984 shall be construed to affect, modify, or amend the Uranium Mill Tailings Radiation Control Act of 1978.

NATIONAL GROUND WATER COMMISSION

SEC. 704. (a) There is established a commission to be known as the National Ground Water Commission (hereinafter in this section referred to as the "Commission").

(b) The duties of the Commission are to:

(1) Assess generally the amount, location, and quality of the Nation's ground water resources.

(2) Identify generally the sources, extent, and types of ground water contamination.

(3) Assess the scope and nature of the relationship between ground water contamination and ground water withdrawal and develop projections of available, usable ground water in future years on a nationwide basis.

(4) Assess The relationship between surface water pollution and ground water pollution.

(5) Assess the need for a policy to protect ground water from degradation caused by contamination.

(6) Assess generally the extent of overdrafting of ground water resources, and the adequacy of existing mechanisms for preventing such overdrafting.

(7) Assess generally the engineering and technological capability to recharge aquifers.

(8) Assess the adequacy of the present understanding of ground water recharge zones and sole source aquifers and assess the adequacy of knowledge regarding the interrelationship of designated aquifers and recharge zones.

(9) Assess the role of land-use patterns as these relate to protecting ground water from contamination.

(10) Assess methods for remedial abatement of ground water contamination as well as the costs and benefits of cleaning up polluted ground water and compare cleanup costs to the costs of substitute water supply methods.

(11) Investigate policies and actions taken by foreign governments to protect ground water from contamination.

(12) Assess the use and effectiveness of existing interstate compacts to address ground water protection from contamination.

(13) Analyze existing legal rights and remedies regarding contamination of ground water.

(14) Assess the adequacy of existing standards for ground water quality under State and Federal law.

(15) Assess monitoring methodologies of the States and the Federal Government to achieve the level of protection of the resource as required by State and Federal law.

(16) Assess the relationship between ground water flow systems (and associated recharge areas) and the control of sources of contamination.

(17) Assess the role of underground injection practices as a means of disposing of waste fluids while protecting ground water from contamination.

(18) Assess methods for abatement and containment of ground water contamination and for aquifer restoration including the costs and benefits of alternatives to abatement and containment.

(19) Assess State and Federal ground water law and mechanisms with which to manage the quality of the ground water resource.

(20) Assess the adequacy of existing ground water research and determine future ground water research needs.

(21) Assess the roles of State, local, and Federal Governments in managing ground water quality.

(c)(1) The Commission shall be composed of nineteen members as follows:

(A) six appointed by the Speaker of the United States House of Representatives from among the Members of the House of Representatives, two of whom shall be members of the Committee on Energy and Commerce, two of whom shall be members of the Committee on Public Works and Transportation, and two of whom shall be members of the Committee on Interior and Insular Affairs;

(B) four appointed by the majority leaders of the United States Senate from among the Members of the United States Senate;

(C) eight appointed by the President as follows:

(i) four from among a list of nominations submitted to the President by the National Governors Association, two of whom shall be representatives of ground water appropriation States and two of whom shall be representatives of ground water riparian States;

(ii) one from among a list of nominations submitted to the President by the National League of Cities and the United States Conference of Mayors;

(iii) one from among a list of nominations submitted to the President by the National Academy of Science;

(iv) one from among a list of nominations submitted to the President by groups, organizations, or associations of industries the activities of which may affect ground water; and

(v) one from among a list of nominations submitted to the President from groups, organizations, or associations of citizens which are representative of persons concerned with pollution and environmental issues and which have participated, at the State or Federal level, in studies, administrative proceedings, or litigation (or any combination thereof) relating to ground water; and

(D) the Director of the Office of Technology Assessment.

A vacancy in the Commission shall be filled in the manner in which the original appointment was made. Appointments may be made under this subsection without regard to section 5311(b) of title 5, United States Code. Not more than three of the six members appointed under subparagraph (A) and not more than two of the four members appointed under subparagraph (B) may be of the same political party. No member appointed under paragraph (C) may be an officer or employee of the Federal Government.

(2) If any member of the Commission who was appointed to the Commission as a Member of the Congress leaves that office, or if any member of the Commission who was appointed from persons who are not officers or employees of any government becomes an officer or employee of a government, he may continue as a member of the Commission for not longer than the ninety-day period beginning on the date he leaves that office or becomes such an officer or employee, as the case may be.

(3) Members shall be appointed for the life of the Commission.

(4)(A) Except as provided in subparagraph (B), members of the Commission shall each be entitled (subject to appropriations provided in advance) to receive the daily equivalent of the maximum annual rate of basic pay in effect for grade GS-18 of the General Schedule for each day (including travel time) during which they are engaged in the actual performance of duties vested in the Commission. While away from their homes or regular places of business in the performance of services for the Commission, members of the Commission shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed inter-

mittently in Government service are allowed expenses under section 5703 of title 5 of the United States Code.

(B) Members of the Commission who are Members of the Congress shall receive no additional pay, allowances, or benefits by reason of their service on the Commission.

(5) Five members of the Commission shall constitute a quorum but two may hold hearings.

(6) The Chairman of the Commission shall be appointed by the Speaker of the House of Representatives from among members appointed under paragraph (1)(A) of this subsection and the Vice Chairman of the Commission shall be appointed by the majority leader of the Senate from among members appointed under paragraph (1)(B) of this subsection. The Chairman and the Vice Chairman of the Commission shall serve for the life of the Commission unless they cease to be members of the Commission before the termination of the Commission.

(7) The Commission shall meet at the call of the Chairman or a majority of its members.

(d)(1) The Commission shall have a Director who shall be appointed by the Chairman, without regard to section 5311(b) of title 5, United States Code.

(2) The Chairman may appoint and fix the pay of such additional personnel as the Chairman considers appropriate.

(3) With the approval of the Commission, the Chairman may procure temporary and intermittent services under section 3109(b) of title 5 of the United States Code.

(4) The Commission shall request, and the Chief of Engineers and the Director of the Geological Survey are each authorized to detail on a reimbursable basis, any of the personnel of their respective agencies to the Commission to assist it in carrying out its duties under this section. Upon request of the Commission, the head of any other Federal agency is authorized to detail, on a reimbursable basis, any of the personnel of such agency to the Commission to assist it in carrying out its duties under this section.

(e)(1) The Commission may, for the purpose of carrying out this section, hold such hearings, sit and act at such times and places, take such testimony, and receive such evidence, as the Commission considers appropriate.

(2) Any member or agent of the Commission may, if so authorized by the Commission, take any action which the Commission is authorized to take by this section.

(3) The Commission may use the United States mails in the same manner and under the same conditions as other departments and agencies of the United States.

(4) The Administrator of General Services shall provide to the Commission on a reimbursable basis such administrative support services as the Commission may request.

(5) The Commission may secure directly from any department or agency of the United States information necessary to enable it to carry out this section. Upon request of the Chairman of the Commission, the head of such department or agency shall furnish such information to the Commission.

(f)(1) The Commission shall transmit to the President and each House of the Congress a report not later than October 30, 1986.

The report shall contain a detailed statement of the findings and conclusions of the Commission with respect to each item listed in subsection (b), together with its recommendations for such legislation; and administrative actions, as it considers appropriate.

(2) Not later than one year after the enactment of the Hazardous and Solid Waste Amendments of 1984, the Commission shall complete a preliminary study concerning ground water contamination from hazardous and other solid waste and submit to the President and to the Congress a report containing the findings and conclusions of such preliminary study. The study shall be continued thereafter, and final findings and conclusions shall be incorporated as a separate chapter in the report required under paragraph (1). The preliminary study shall include an analysis of the extent of ground water contamination caused by hazardous and other solid waste, the regions and major water supplies most significantly affected by such contamination, and any recommendations of the Commission for preventive or remedial measures to protect human health and the environment from the effects of such contamination.

(g) The Commission shall cease to exist on January 1, 1987.

(h) Nothing in this section and no recommendation of the Commission shall affect any rights to quantities of water established under State law, interstate compact, or Supreme Court decree.

(i) There is authorized to be appropriated for the fiscal year 1985 through 1987 not to exceed \$7,000,000 to carry out this section.

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